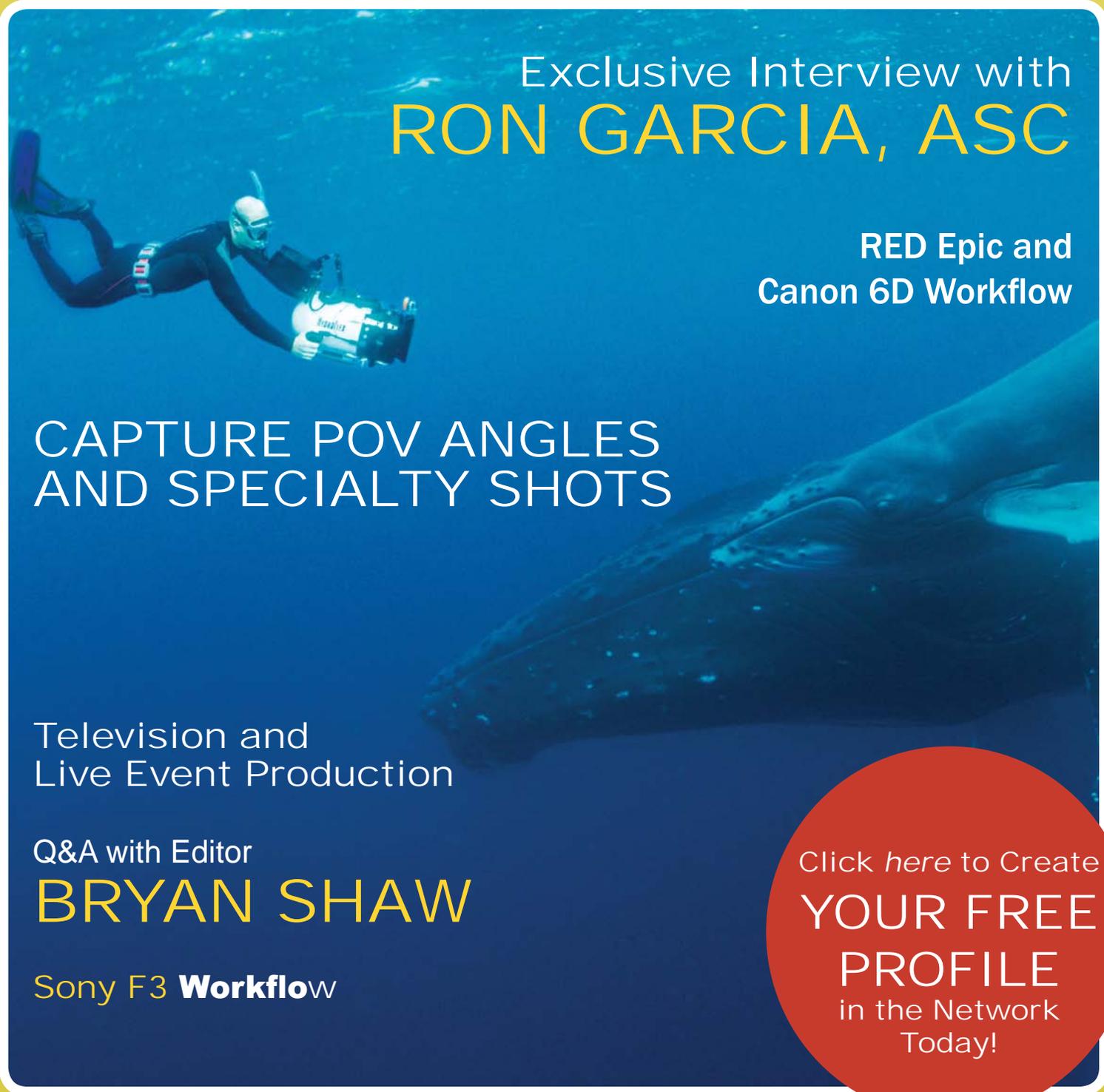


HD PROGUIDE

From the Publisher of HDProGuide.com, the Professional Production Resource

2014, Vol. 2, No. 1



Exclusive Interview with
RON GARCIA, ASC

RED Epic and
Canon 6D Workflow

CAPTURE POV ANGLES
AND SPECIALTY SHOTS

Television and
Live Event Production

Q&A with Editor

BRYAN SHAW

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“When shooting ‘42,’ Tiffen filters helped me hit it out of the ballpark.”

DON BURGESS, A.S.C.



Legendary cinematographer Don Burgess was seeking a period look when shooting the hit feature “42.” He chose to give each year of Jackie Robinson’s career represented in the film its own subtle look with a different Tiffen filter. “I wanted it to become softer, warmer and progressively a little cleaner, with the colors less muted, as Jackie moved closer to playing for the Dodgers,” Don says. As for Tiffen filters, “I’ve been using them for 30 years – the consistency makes them a product I know I can rely on.”

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As HD Pro Guide Magazine editorial crew is on magazine editing lockdown as we get this technology-packed edition of HD Pro Guide Magazine to press, I stand (not sit) editing at my workstation with a 10-hour loop of some high-sugar, hyperactive dubstep playing through surround sound. Enjoy this wonderful issue of HD Pro Guide Magazine (NAB Edition). The NAB2014 exhibit booths listed in this edition are must-visit booths.

HD Pro Guide Magazine editorial staff gives a shout out and very special thanks to all of you who have helped make this magazine possible. We thank all of our readers, subscribers, and online network members; we thank our contributing writers and professional training instructors; and we thank our advertisers and sponsors for their support. If you enjoy reading HD Pro Guide Magazine and want to see more pages, please remember that without our advertisers and sponsors, this magazine would not be possible. So please, when you're researching, testing, and purchasing new equipment and gear for your productions, please remember to check out our advertisers and sponsors' products first, and let them know you read about their company or saw their company listing in HD Pro Guide Magazine. We also want to give a special thanks to the filmmakers, film producers, and HD Pro Guide Magazine readers listed below for sharing their comments. We greatly, greatly appreciate your feedback.

"HD Pro Guide Magazine is a brisk, eye-popping, skills-driven, counter-intuitive foray into next-gen video and film with savvy advice on gear and tricks-of-the-trade. A must-read."
 ~Bill Vartorella, Craig and Vartorella, Inc.

"HD Pro Guide Magazine keeps professional filmmakers informed of new technologies with selective and pertinent articles that are crisply written without the usual extraneous wordiness seen in similar magazines. In addition it connects professionals to a community of media makers who not only care about the quality of their productions but who use modern technology to communicate the good values needed to make our world a better place."
 ~Skip Blumberg, www.skipblumberg.com

"I am often looking for other people's experiences with equipment and techniques in the many forums out there on the internet, so it's great to have a place like HD Pro Guide Magazine where professionals can share their unique talents and production experiences, like Joe Capra's time-lapse techniques in Iceland."
 ~William Donaruma, Director, Center for Creative Computing, Teaching Professor in Filmmaking, www.nd.edu/~wdonarum

"The HD Pro Guide Magazine looks great! I would love to look more on rentals ads, promotions, and packages from rental houses like CSI."
 ~Gleb Osatinski, Director/Writer/Producer, New York
 www.houseattheedgeofgalaxy.com
 www.imdb.com/name/nm4685276

"I just finished the premier edition of HD Pro Guide Magazine, and I have to say, I'm impressed, it's a fast read, full of great info about the latest in new equipment, tons of interesting production tips and some solid inside industry knowledge. Kudos to publisher Kim Welch and editor Jody Michelle Solis for coming up with a fast read, entertaining and educational print and online publication."
 ~Dean Goldberg, Associate professor, Communication Arts, Co-Director, Technology and Digital Media, Mount Saint Mary College, www.msmc.edu

"I have been an online member of StudentFilmmakers.com for many years and recently discovered the new HD Pro Guide Magazine, which is fantastic. The articles and interviews are a great insight for filmmakers from every level. I'm a filmmaker with a fair few films under my belt, and like everyone, I started from scratch, and I'm always discovering and learning new things. A magazine like HD Pro Guide Magazine is a way to do that. I recommend it to any filmmaker and anyone who is in the film industry."
 ~Jason Croot, Filmmaker, UK, IMDB www.imdb.com/name/nm2907429

Enjoy this issue!

All the Best,
Jody Michelle Solis
 www.hdproguide.com/network/JodyMichelleSolis

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Subscriptions, bulk orders, and collections: www.hdproguide.com
 1 Year Subscription: US\$45.00. 2 Year Subscription: US\$90.00.
 3 Year Subscription: US\$135.00. For subscription, mailing address change and distribution inquiries, go to www.hdproguide.com/about

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Postmaster
 Send address change to: HDProGuide Magazine
 P.O. Box 286636, New York, NY 10128

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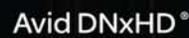
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BLACKCAMSYSTEM EXHIBITS AT NAB2014, BOOTH #C5649

Thomas Janze is the founder and CEO of BlackcamSystem. Being a director for live concert recordings/broadcast, Thomas was looking for a camera system that could be used on stage without obstructing the scene and that would not disturb artists and audience. No such system existed. Hence, Thomas teamed up with robotic engineer Jan Karabas and together they created BlackcamSystems.



In this exclusive interview, Thomas Janze talks with HD Pro Guide Magazine about some of his favorite and memorable production experiences and shares some quick tips for capturing POV angles and specialty shots with BlackcamSystems. Janze also shares new announcements for BlackcamSystem exhibiting at NAB2014, Las Vegas.

Q&A

AS A DIRECTOR FOR LIVE CONCERT RECORDINGS AND BROADCAST, WHAT IS ONE OF YOUR

MOST FAVORITE OR MEMORABLE PRODUCTION EXPERIENCES?

THOMAS JANZE: I started using BlackcamSystems first when directing live concerts for Volkswagen Sound Foundation. I must explain – I have a film production company called Totho, producing live concert recordings, music videos, commercials and theatrical documentaries. So, then I directed a live concert of the American band Incubus in Berlin which was live streamed, using two B20 systems. The band and their management were so excited about the new perspectives; they immediately bought 2 systems for their world tour. Those two systems have been on a second world tour with Incubus, we never heard of any complaints, which also proves how solid and Rock'n'Roll the systems are. Actually, the production company also used these two B20s for another world tour, with the band Rush. Both bands came to Berlin, so we could kind of reunite with our first two Babies, that was quite emotional, I must confess.

AS IT RELATES TO WORKING WITH BLACKCAMSYSTEMS, WHAT MAKES SHOOTING FOR LIVE CONCERT RECORDINGS AND BROADCAST UNIQUE TO SHOOTING OTHER KINDS OF PRODUCTIONS IN YOUR EXPERIENCE?

THOMAS JANZE: Well, with regards to using the Blackcam, shooting a live concert is especially satisfying, as with our systems we get up-close images that weren't possible before. Blackcam's systems are super small, flexible and easy to integrate into any stage set ups. Such as the B10 or B20 operated on a circle around the drum set, like we did for Coldplay – a 180° circle, or a concert of a German Punk band called Die Toten Hosen, for them we set up a 360° circle, both productions were directed by famous British director Paul Dugdale. Live TV productions like the finals of "The Voice" now look different, since for example one of the three B40 systems that were used for the show was integrated into the stage, tracks and dolly invisible beneath the stage, so there is only the remote head and the camera, which seems to fly and offers super dynamic images and the possibility to react immediately to any spontaneous action on stage or interaction with performers and the jury. Also, I directed the music video of last

year's winner of "The Voice of Germany" using the B20 with a Canon C300.

IF YOU COULD SHARE SOME QUICK TIPS RELATED TO CAPTURING POV ANGLES AND SPECIALTY SHOTS WITH BLACKCAMSYSTEMS, WHAT WOULD THEY BE?

THOMAS JANZE: Well, obviously the shots around the drum set, shooting from a position behind or next to the drummer is very dynamic, plus the systems are super versatile so one can easily follow the drummer's moves. Or using a set up of a straight track running along the back of a stage, aiming towards the audience, like we did for a 3D production about the World's biggest Heavy Metal Festival "Wacken", where bands like Motörhead, Rammstein, Deep Purple or Alice Cooper performed. And also, very importantly, the set up in front of a stage, since the systems are so small and adaptable to any stage design we always achieve minimal disturbance for audience and artists, while creating intimate and unique images. Finally, a system running upside down, mounted to the ceiling of a venue or studio, which we have done for "XFactor UK" for example. In a nutshell, we basically produce images, create new



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perspectives, and I had this vision as a director that it must be possible to reach those angles and thus I ended up founding Blackcam in order to create the toys I wanna use for my work as a director. Other directors too truly appreciate the advantages Blackcam has to offer. For example, well-known Austrian director Hannes Rossacher just recently used seven BlackcamSystems for a live concert that was streamed into theatres all over Germany.

TELL US ABOUT WHAT YOU'RE ANNOUNCING FOR BLACKCAMSYSTEM AT THE 2014 NAB SHOW IN LAS VEGAS.

THOMAS JANZE: We do have two brand new features that will be launched at NAB. We developed a remote service kit to provide technical support and maintenance – worldwide, 24/7, via Internet. Furthermore, BlackcamSystems can now be ordered in fully automated editions. This includes full motion control, programming of dolly positions, remote head movement, lens, iris and zoom. The user interface, a 10" touch tablet device, is simply placed beside the

control desk and provides all system options to the operator.

We are exhibiting our entire product family. The three models - B10, the smallest one; the B20, our medium sized model; and the B40 which is usually used for major TV productions. Shows like "X Factor", "The Voice", and "Next Top Model" by Heidi Klum.

We will set up a B10 on a 180° curved track around a car body. So anyone who wants to discover the unique perspectives and versatility of our systems can operate the B10 and experience the easy going workflow and actual fun of working with our systems.

DO YOU DO TRAINING AND EDUCATIONAL WORKSHOPS FOR BLACKCAMSYSTEM CAMERA SYSTEMS?

THOMAS JANZE: We do offer workshops in Germany and from this year on also in New York by All Mobile Video, our US partners, and wherever clients want us to offer a workshop. We like travelling and our systems are easy to transport. The B10

is hand luggage! During NAB, visitors are more than welcome to try and operate the systems. At previous exhibitions like last year's IBC in Amsterdam, people loved to operate the systems themselves!

ARE THERE ANY FUTURE PLANS FOR BLACKCAMSYSTEM THAT WE SHOULD KNOW ABOUT?

THOMAS JANZE: Yes! We are currently entering the Asian Market and setting up an office in Bangkok, Thailand. And, we are working on an APP, so in the near future the systems can be operated via smartphones, iPhones and tablets or iPads.

COULD YOU TELL US MORE ABOUT YOUR DISTRIBUTORS IN THE US?

THOMAS JANZE: We have partners in the US, All Mobile Video, the American premier provider of end-to-end video and audio solutions. They are located in New York City, but operate nationwide.

WWW.BLACKCAMSYSTEM.COM



BLACKCAM 4D

BlackcamSystem is the world's smallest professional camera system on tracks. BlackcamSystems can be installed in, around or above a stage or set (over or underslung) for dynamic moving shots. Due to their compact size, minimal noise generation and uniquely versatile track, they seamlessly integrate with the action without obstructing the talent or other set elements. The 3 models can be operated using a variety of camera models and remote heads.

BLACKCAMSYSTEM B40



BlackcamSystem B40 with Sony HDC-P1

The B40 can accept various cameras, including the Sony F5/F55/P1, ARRI Alexa M XT, RED Epic and Scarlet and similar sizes.

Ideal for camera/lens systems weighing up to 5 kg/11 lbs, the B40 has a base that's 73 cm/28.7" x 30 cm/11.8" with a height of 46 cm/18.1". This elegantly outfitted system travels as fast as 4 m/13.12 ft. per second

or as slow as the operator desires, down to a gentle stop.

SPECIFICATIONS

BLACKCAM, DOLLY & REMOTE HEAD*

- **Dimensions:** 73 cm long x 30 cm wide x 46 cm high (28.7 in x 11.8 in x 18.1 in)
- **Maximum Travel Speed:** 4 m/13.1 ft per second
- **Maximum Weight Capacity:** 5 kg/11 lbs
- **Power Supply:** 100-250 VAC power supply, max. 3Amp w/o camera, or 2 onboard lithium batteries
- **Weight:** varies according to configuration

CAMERA

Various including Sony F5/F55/P1, ARRI Alexa M XT, RED Epic and Scarlet and similar sizes with maximum weight of 5 kg/11 lbs

TRACK

- **Dimensions:** 30 cm/11.8 in wide x 12 cm/4.7 high
- **Weight:** 4 kg/m, 2.7 lbs/ft
- **Coating:** Black anodized
- **Track mount:** Mounting Holes for truss half-couplers on slidable track brackets

*Other remote heads, like PeePod or Scorpio Remote Heads are also compatible. Note that the weight of the remote head affects camera weight, please inquire.

BLACKCAMSYSTEM B20



BlackcamSystem B20 with HDC 100 upside down.

The B20 is compatible with the Bradley Engineering Camball / HDC_150, as well as DSLR cameras such as the Canon 5D and similarly sized camera setups.

The B20 measures 39 cm/15.4" x 30 cm/11.8" at its base and has a height of 24 cm/9.4". The sled is big enough to hold a radio transmitter (IDX Cam-Wave, Boxx TM, Link 1500, etc.) and/or recording device (Blackmagic Hyper Deck, nanoFlash, KiPro Mini, Atomos Ninja, Samurai, Gemini, etc.)

SPECIFICATIONS

DOLLY & REMOTE HEAD

- **Dimensions:** 39 cm long x 30 cm wide x 24 cm high (15.4 in x 11.8 in x 9.4 in)
- **Maximum Travel Speed:** 3 m/9.8 ft per second
- **Maximum Weight Capacity:** varies according to configuration
- **Power Supply:** 13.5-24 V, maximum 5 amp (w/o camera, one battery optional)
- **Weight:** varies according to configuration

CAMERA

Various including Bradley's Camball HDC 150, and DSLR cameras such as the Canon 5D and similar sizes with a maximum weight of 5 kg/11 lbs. Camera weight of the B20 is up to 2.5 kg, depending on remote head.

TRACK

- **Dimensions:** 30 cm/11.8 in wide x 12 cm/4.7 high
- **Weight:** 4 kg/m, 2.7 lbs/ft
- **Coating:** Black anodized
- **Track:** mount Mounting Holes for truss half-couplers on slidable track brackets

BLACKCAMSYSTEM B10



BlackcamSystem B10 with GoPro

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With a total weight of 2.3 kg/5 lbs, this sporty unit and matching suitcase is just the thing for shooting action sports and table-top work. It is ideal for the new breed of tiny HD cameras, including GoPro, Modula Baby MKII, Indiecama and SinaCAM. This tiny mover has a base that measures just 23 cm/9.1" long by 17 cm/6.7" wide and just 17 cm/6.7" high. The system travels via remote control at speeds as high as 4.9 ft per second.

SPECIFICATIONS

DOLLY & REMOTE HEAD

- **Dimensions:** 23 cm long x 17 cm wide x 17 cm high (9.1 in x 6.7 in x 6.7 in)
- **Maximum Travel Speed:** 1.5 m/4.9 ft per second
- **Maximum Weight Capacity:** 450g/1 lb
- **Power Supply:** 13,5-24V V, maximum 4 amp (w/o camera, one battery optional)
- **Weight:** 2.3 kg/5 lbs (w/o camera)

CAMERA

Various including GoPro, Modula Baby MKII, SinaCAM, Indiecama and similar sizes with a maximum weight of 1 kg/2.2 lbs. Camera weight is up to 0.5 kg, depending on remote head.

TRACK

- **Dimensions:** 15 cm/5.9 in wide x 3 cm/1.2 in high
- **Weight:** 1.4 kg/m, 0.9 lbs/ft
- **Coating:** Black anodized
- **Track mount:** 3/8-in threads on slidable track brackets

All 3 systems' tracks consist of multiple straight and curved segments. Tracks for B20 and B40 can be mounted on a truss. B10 tracks are usually set up on stands.

The full-sized Blackcam Model B40 accepts various cameras, including: ARRI Alexa M, RED Epic and Scarlet, Sony F5/F55/P1 and similar sizes. The mid-sized B20 is compatible with Bradley's Camball HDC 150, and DSLR cameras such as Canon 5D and similar sizes. The super compact B10 fits a suitcase style carrier for on-board air transport. Ideal for tiny HD cameras like GoPro, Modula Baby MKII, SinaCAM and Indiecama.

The systems have been successfully utilized for live concerts, major variety style television productions and fashion runway

shows, like Heidi Klum's "Germany's Next Top Model" and "Boss Black Beijing". BlackcamSystem's North American partners are All Mobile Video, the U.S. premier provider of end-to-end video and audio solutions, located in New York City, NY. In order to cater to the Asian market BlackcamSystem is currently setting up an office in Bangkok, Thailand.

BLACKSYSTEMS FOR TELEVISION PRODUCTIONS

The B40 BlackcamSystem is being used on various major TV shows. For example, in December 2013, "The Voice of Germany" used three BlackcamSystems that delivered never seen before perspectives of their final live show. Other TV productions include Heidi Klum's "Germany's Next Top Model", the newsroom of the German election, or the live stream of the red carpet from the movie premiere of "World War Z" in Berlin.

CONCERT PRODUCTIONS

The BlackcamSystems have been utilized at and inspire live concerts such as Coldplay, Alicia Keys, Pet Shop Boys, Incubus and Editors, especially dynamic images by BlackcamSystem's 360° system mounted around a drum set offers new perspectives. Just recently 7 BlackcamSystems were part of one live concert, which has been live streamed to cinemas all over Germany. The various systems were positioned above, below and around the stage, on up to 75m long tracks, as well as behind the keyboard and around the drum set.

3D PRODUCTIONS

At the production of the event-documentary, "Wacken 3D: Louder than Hell", material has been shot by mounting two LMP1200HD mini cameras on the B40 BlackcamSystem behind the drum sets on each of the two stages. Additionally Blackcam was responsible for the dynamic shots at the Boss Black Fashion Show in Beijing. A 3D live stream was provided by mounting a U3 remote head and 2 Modula Baby MKII cameras on the B20 system.

BLACKCAMSYSTEM NEWS

24/7 maintenance per app/web

If you buy the additional Remote Service Kit, BlackcamSystem offers you a set of prepared and configured tools, which you simply have to insert into the system and connect to the Internet. Then BlackcamSystem can check your system and settings and locate or fix sources of errors or update your system to the current stage, from the BlackcamSystem office in Berlin or worldwide. All that without sending your system back home to Berlin.

COMPLETE AUTOMATION

U1 – Position Programming – means that you can save the actual position of the dolly and of all axis of the remote head with lens (pan, tilt, zoom, focus, iris) to a nameable preset and with hitting the preset button on the dolly will recall and drive to this saved position, regardless where it was before, and will also move the remote head and the lens into the saved alignment to really get the same shot as saved before. The number of saved presets is not limited.

U2 – Motion Control – does the same as position programming but not only saves the axis and dolly end positions – it can recall the full move from a starting position including all speeds and movements to the final positional end.

UE – Is the Motion Control user interface, a 10" touch tablet device that simply gets placed beside the control desk and which provides all system options to the operator. It gets connected via the IP-based interface to BlackcamSystem's track controller.



BlackcamSystem: 3 Camera Systems



BlackcamSystem

NEW CONCEPT REMOTE-CONTROLLED CAMERA TRACKING




B
B10

SPECIFICATIONS

DOLLY & REMOTE HEAD
Dimensions 23 cm long x 17 cm wide x 17 cm high (9.1 in x 6.7 in x 6.7 in)
Maximum Travel Speed 1.5 m/4.9 ft per second
Maximum Weight Capacity 450g/1 lb
Power Supply 12-16 V, maximum 1.5 amp (w/o camera, one battery optional)
Weight 2.3 kg/5 lbs (w/o camera)

CAMERA
 Various including GoPro, Modula Baby MKII, SinaCAM, Indiecams and similar sizes with a maximum weight of 1 kg/2.2 lbs



B
B20

SPECIFICATIONS

DOLLY & REMOTE HEAD
Dimensions 39 cm long x 30 cm wide x 24 cm high (15.4 in x 11.8 in x 9.4 in)
Maximum Travel Speed 3 m/9.8 ft per second
Maximum Weight Capacity varies according to configuration
Power Supply 12-16 V, maximum 1.5 amp (w/o camera, one battery optional)
Weight: varies according to configuration

CAMERA
 Various including Bradley's Camball HDC 150, and DSLR cameras such as the Canon 5D and similar sizes with a maximum weight of 5 kg/11 lbs



B
B40

SPECIFICATIONS

BLACKCAM, DOLLY & REMOTE HEAD*
Dimensions 73 cm long x 30 cm wide x 46 cm high (28.7 in x 11.8 in x 18.1 in)
Maximum Travel Speed 4 m/13.1 ft per second
Maximum Weight Capacity 5 kg/11 lbs
Power Supply 100-250 VAC power supply, max. 3Amp w/o camera, or 2 onboard lithium batteries
Weight varies according to configuration

CAMERA
 Various including ARRI Alexa M, RED Epic & Scarlet, Sony F5/F55/P1 and similar sizes with maximum weight of 5 kg/11 lbs

by William Donaruma and John Klein

WHEN
IN ROME

When someone asks you if you are willing to take on a project that brings you to Rome for a week, isn't that a rhetorical question? My ancestry wanted to bring me back home, but first I had to determine how to approach a production on the 3D digital mapping of the Roman Forum by architects and archeologists that would be presented in both Italian and in English. (I should mention that despite my heritage, I am not fluent in Italian by any means; during a night of wandering the city, a young Italian woman stopped to ask me for directions and was profoundly disappointed by my thick American accent. I may walk the walk, but I certainly don't talk the talk!)

Having spent much of the last few years shooting on a RED Epic, the camera was a natural default for me. The 5K resolution would help capture the extreme detail showcased in these advanced techniques used by the architects on the D.H.A.R.M.A. team, which was formed to digitally map, research and analyze world heritage sites, such as the Roman Forum. Using 3D laser technology they created point cloud images measuring within 1-4mm in accuracy and then laid GigaPan images over the points to create interactive and highly detailed models for research and visitor awareness of these structures.

Luckily, I was able to call upon Chicago-based cinematographer and my good friend, John Klein, to assist on the project. We had both shot another project involving translations during interviews and knew how to double the audio feed to the subject and to the translator. John is also very skilled with DSLR shooting, something that had yet to pique my interest, but this was a good opportunity to shoot multi-camera interviews and double our efforts using various camera motion techniques. We also wanted to use an external recorder for audio, which we'd then sync to scratch tracks on the Epic

and his Canon 6D.

The biggest advantage to adding the 6D was that we could float the second camera on a Kessler Pocket Jib Traveler, making for more dynamic interviews in a lightweight package. I have lugged a lot of gear around before, but with a two person crew and stone roads that are thousands of years old in the Forum, carts are not that effective. We also brought my very portable RigWheels dolly and purchased PVC pipe along with sand for our counter-weight bags on the jib to incorporate Epic dolly moves in and around the Forum.

Adding to the portability factor, John was using Canon EF and Zeiss Contax manual lenses, while I continued to use my Nikon Pro and Tokina lenses on the Epic. I used these successfully on a project in Ireland as well, and having both of us on DSLR lenses kept continuity between camera images. While I haven't been a fan of DSLRs in the past, certain qualities made it a good complement to the Epic: the lightweight rig, its sensitivity in low-light areas, and especially its color rendition and latitude when shooting in the Cinestyle picture profile. It also allowed John to take still shots of our setups at any given moment, both for publicity and for posterity! I tended to stay wide during interviews to capture the settings we chose in 4K, while John would shoot mostly tighter in a floating $\frac{3}{4}$ profile. At times he would go wider when we had open spaces that would allow his camera to jib up and over the subject more. We would monitor each other's composition so we wouldn't be matching too closely, in order to have variety in the edit.

In order to incorporate a translation audio track when shooting Italian interviews, we had a wireless mic on the subject running to our H4n Zoom mounted on the camera. We then used a wired lavalier mic in channel 2 that

by William Donaruma and John Klein



William Donaruma has years of production experience having worked for Universal Studios as well as a variety of production companies and major television networks in film and video production. Returning to Notre Dame to teach production courses, he has won the Kaneb Teaching Award and was granted a fellowship at the Academy of Television Arts and Sciences. www.nd.edu/~wdonarum

John Klein is a freelance director of photography based in Chicago. He has traveled around the world and back for his craft and has shot dozens of projects, ranging from award-winning short and feature films to music videos, web series, and documentaries, but considers *NightLights* one of his crowning achievements. When not shooting, John also serves as producer of *Glass City Films*, through which he has overseen as producer and lensed the short films *Rendezvous*, *Hangers*, *The Sleepover*, *Under The Table*, and *Honeybees*. He has also produced a trio of feature films in *Glass City*, *Happily After* (his directorial debut) and *Separation Anxiety*, in addition to several music videos and side projects. For more information, check out www.windycitycamera.com and www.glasscityfilms.com.

ran to our translator in a secluded spot along with a headphone output from the Zoom. She could then hear the interview and translate along side the main track, which would sync up together later in multi-cam mode. I would pick up key phrases in the edit and cut accordingly, later eliminating the translation track and adding a panned track of the main interview for a stereo output.

At the end of each day, John would back up the DSLR footage to a portable drive and hand it off to me. I would then back that up in a daily folder with my Epic footage onto a 4TB master drive, which would then get backed up again to an internal drive I carry with a reader. It makes for an inexpensive and small security package that I keep in an anti-static hard case. We averaged anywhere from 145Gb to 260Gb a day; our big day was also the last day, because the sun finally decided to come out! It absolutely poured rain when we arrived and continued for days, but then it finally broke near the end of the week, so we were able to get a truly majestic sunset and then an equally beautiful sunrise the last morning we were there. The Epic's dynamic range and time-lapse capabilities really make it worth the effort when you get those magic shots!

I was new to the multi-cam feature in Premiere Pro CC, because I am usually shooting solo, but it was simply amazing. I had initially started by manually taking the H4n Zoom audio tracks and syncing them up with Epic and 6D footage in one sequence. I knew there was the

ability to cut between tracks in multi-cam mode, but then I looked into the process further, which eliminated the need for me to manually arrange tracks together. By selecting the Epic, 6D, and Zoom files I could use the "create multi-camera source sequence" function, which then syncs up the clips using the audio tracks and creates a new nested sequence. You can then put your viewer into a multi-cam mode allowing you to see each camera in a window and the master (record) track in another. Playing the clip and selecting the camera window as it plays created an edited timeline could be re-recorded or edited manually once you drop it in your master project sequence. I could easily open the associated sequence that lays out all three tracks and select the 6D track to scale to frame size, matching my 4K sequence setting.

By the end, we had terabytes of awesome footage, a sore set of back muscles, and a whole slew of new techniques to take with us on future travels. It is always good to venture outside of your comfort zone and take on new challenges; otherwise, we don't learn anything or get any better in our production roles. A traveling production alone has its own set of challenges that just make you better at it when the next one comes up. At the end of one very busy day, literally, John and I decided to shoot a short film through the city streets lit by the beautiful monuments, DSLR pushed to 3200 ISO and dual track audio in our pockets via an H4n. What else are you going to do, when in Rome?





CAMERA MOTION RESEARCH: RADIAN WIRELESS HD VIDEO & CAMLINK ACCESSORIES



Q&A

COULD YOU TELL US A LITTLE BIT ABOUT YOUR COMPANY, CAMERA MOTION RESEARCH?

RICHARD GREB: CMR was formed in 2009 to manufacture and sell handheld camera stabilizers. We have shipped thousands of Blackbird stabilizers to 47 countries. And now CMR is shipping cost effective professional quality wireless HD sets.

HOW DID THE CONCEPT FOR THE RADIAN COME ABOUT?

RICHARD GREB: More than three years ago, we started testing consumer grade wireless HD sets to evaluate their effectiveness as low cost wireless video solutions for cameras. These sets were designed for the home entertainment market, you know like sending video wirelessly from a DVD player in one room to a TV in another room, or for playing a video game on your laptop but showing it on a large screen TV without cables.

For use in camera applications, the consumer wireless HD sets had some great characteristics. They didn't require a lot of power, they were capable of sending uncompressed 1080P(60), and they had low latency. But they did not have good form factors for camera rigs, and they had limited

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range, typically 30 to 60 feet.

Practically all low latency wireless sets are based on Amimon WHDI technology, and when Amimon professional sets with better range and performance became available, we saw the opportunity to brand our own systems based on them. The available Amimon sets didn't have self-contained power or good mounting features. We added USB battery options and robust mounting features with our CamLink Backbones, and demonstrated early prototypes at NAB 2013.

COULD YOU TELL US MORE ABOUT THE PRODUCTS AND SOLUTIONS THAT CAMERA MOTION RESEARCH HAS PLANNED FOR 2014?

RICHARD GREB: We want to provide more complete solutions for wireless video applications, like the lightweight monitor yoke we're now shipping, and will soon add field monitors to our product line. A new small TX Backbone and battery will meet customer needs for the most compact and lightest weight transmitter configurations. And we have more power options in the works, along with HD-SDI converter solutions that can be integrated with our Radian Backbones.

THERE ARE MANY DIFFERENT WAYS TO SETUP THE RADIAN WITH DIFFERENT WORKFLOWS, CAMERAS, AND CAMERA MOVEMENT/POV SYSTEMS LIKE CRANES AND JIBS. COULD YOU GIVE US SOME EXAMPLES OF THE USES AND SETUPS FOR THE RADIAN FOR USE ON SET AND IN DIFFERENT PRODUCTION SCENARIOS?

RICHARD GREB: Radian sets are perfect tools to use with the crane or jib setups you mention and much more. They are obvious solutions for even the lowest budget production environments, where a director/client monitor adds convenience and value. The multi-axis gimbal



stabilizers now coming into wide usage, typically need wireless video for follow focus and gimbal control. A Radian set was used on a cablecam in a large indoor event to send live video to a jumbo screen. And a wedding videographer made his client very happy when he used a Radian set to send video from a camera in the main banquet room to a big screen in an overflow room.

ARE THERE ANY NEW THINGS THAT ARE BEING ANNOUNCED FOR CAMERA MOTION RESEARCH AT THE 2014 NAB SHOW IN LAS VEGAS?

RICHARD GREB: For our Radian wireless HD video line, we're introducing a mini TX Backbone, which makes for an incredibly light transmitter package weighing only 6 oz. including a 3 1/2 hour battery. It's very cool on a Blackmagic Pocket Cinema

camera, or small multicopter rigs, and great for 3 axis gimbal stabilized rigs to eliminate the HDMI cable from camera to frame. We'll also show SDI to HDMI and HDMI to SDI converter packages integrated with Radian Backbones. And the iFootage Shark slider is a best in class product that we're excited to be carrying.

Attendees can check out our Radian wireless HD sets on cameras ranging from a GoPro to a Sony FS100. And they can test the performance of a Shark slider while watching the shot with a Radian wireless connection to a wide screen TV, or while a colleague plays director holding a MustHD monitor. The curious and perhaps brave hearted, can try flying a camera on our Blackbird handheld stabilize. Booth staff will help get them started.

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CINEMECANIX EXHIBITS AT NAB2014, BOOTH #C12129

Cinemecanix is a shoulder rig systems company specializing in engineering accessories, gear and systems to help fit adapt and simplify the filming and shooting process.

Simple ideas and over 30 years experience working in the television and film industry, combined with hundreds of different filming situations with various cameras and accessories, have led Cinemecanix to develop products to complement systems you already own or give you the components you need to get the job done.

Cinemecanix's philosophy for building the right shoulder rigs is, "Keeping it simple and making it solid". Cinemecanix rig components are designed to fit and to work seamlessly with anything you need to use with whatever camera you use. Every aspect of Cinemecanix rig components are designed with the cameraperson in mind. Think of Cinemecanix shoulder rig systems as a mechanic's set with fully interchangeable parts using common standards.

All screws are either 1/4-20 or 3/8-16, so if you need replacements in a hurry, a quick trip to any hardware store will do the trick. In Cinemecanix's design process, they have also included not only the 15mm standard but also a 1/2 inch standard giving you options in case you run out of your 15mm rods.

Q&A

WHAT IS CINEMECANIX ANNOUNCING AT THE 2014 NAB SHOW IN LAS VEGAS?

ERIC AUCLAIR: We are announcing many new things for 2014. The Black Series is our high-end products with Arri-like standards. With all the new specifications and materials used, these new versions come

with a hard case and accessories. This Series is aimed at Studios and professional camera operators demanding the highest quality for years of dependable use. We still retain our base models with a powder-coat finish, these rigs and accessories are all Double-Hard anodized Aluminum and Stainless Hardware.

We also have two new rigs, one specifically designed for the Arri Alexa family, namely the classic, XT Studio and the brand new Amira. The next one is our "Run & Gun" C4 series which is designed to fit in small spaces for travel and still retain the possibility to accommodate many accessories again for professional productions. We have redesigned our lens support system and also our compact shoulder pad (C6) for camera operators wishing to improve a shoulder system they already own.

We are exhibiting our Flagship C1 Pro-Rig which we have sold all over the world, the C1A for Alexa, the new C4 "Run & Gun", the C6 shoulder pad and accessories.

Our whole product line with different cameras will be exhibited so attendees can try for themselves what a truly balanced shoulder rig feels like.

DO YOU HAVE ANY SPECIAL GUESTS AT YOUR BOOTH AT NAB THAT WE SHOULD KNOW ABOUT?

ERIC AUCLAIR: Raffael Dickreuter is one of our guests this year. He will be showing off a rig we have designed for Pre-Visualization in CG movies.

TELL US MORE ABOUT RAFFAEL DICKREUTER.

ERIC AUCLAIR: Raffael Dickreuter is a designer and photographer based in Los Angeles, CA. Originally born in Switzerland, he has a diverse professional background in film visual effects, design, web, advertising and photography. As designer and animator he worked on feature films such as "Terminator Salvation", "The Incredible Hulk", "Superman Returns", "Iron

Man" and others. He has worked for directors such as Steven Spielberg, Zack Snyder ("300"), Martin Campbell ("Casino Royale", "GoldenEye") and Gore Verbinski ("Pirates of the Caribbean").

Creations; he founded XSIbase.com in 2002, which became the world's largest social online community for Softimage visual effects software in a time before Facebook. In 2009, he developed a virtual camera system which allows directors to scout virtual film sets and action sequences. It has been used on films such as "Green Lantern" (2011) and "Superman: Man of Steel" (2013). In 2012, he founded ActionDesignPhoto.

DO YOU HAVE OTHER GUESTS AT THE CINEMECANIX BOOTH AT NAB2014?

ERIC AUCLAIR: Our other guest is Jarmo Pohjaniemi from Shoot the Centerfold, which he has built with more than 15 years of experience, seminars, webinars, workshops, DVD tutorials, posing guides and various other media. The masters at Shoot the Centerfold have developed the most comprehensive educational program the world of photography has ever had.

BY THE WAY, DO YOU DO TRAINING AND EDUCATIONAL WORKSHOPS FOR CINEMECANIX PRODUCTS AND SOLUTIONS?

ERIC AUCLAIR: We have a new program this year we will be starting for workshops and tutorial videos with the interest from many schools, including the California State University Media Arts Festival.

ARE THERE ANY FUTURE PLANS FOR CINEMECANIX THAT WE SHOULD KNOW ABOUT?

ERIC AUCLAIR: We are constantly evolving and thinking of what we can improve to make the camera operator's job easier.

IF YOU COULD SHARE SOME QUICK TIPS RELATED TO THE APPLICATION OF CINEMECANIX RIGS, WHAT WOULD THEY BE?

ERIC AUCLAIR: Stabilize the camera. Get familiar with the movements you will be doing for your shots, visualizing and running through each step of a scene like a dancer rehearsing choreography. Practice, practice and practice. Never ever be afraid to ask for help learning new things about camera handling.

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SHAPE EXHIBITS AT NAB2014, BOOTH #C5443



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Q&A

ARE THERE ANY NEW THINGS THAT ARE BEING ANNOUNCED FOR SHAPE AT THE 2014 NAB SHOW IN LAS VEGAS?

NICOLAS MARCHAND: Yes, plenty of new products coming out this year. A new Gimbal system for GoPro cameras and DSLRs. Sort of a gyro system built with a handheld solution. A new DSLR version of what we had before, revamped and modified. New quick release plates. A

start and stop button system integrated on handles for Sony Cameras. A new Pro Follow focus aimed to target the broadcast industry. New bundles for small body cameras. And a few surprises.

WHAT ARE THREE IMPORTANT THINGS WE SHOULD KNOW ABOUT SHAPE RIGS?

NICOLAS MARCHAND: They're easy to work with, very practical and customizable, and lifetime warrantied.

DO YOU HAVE ANY SPECIAL GUESTS AT YOUR BOOTH AT NAB2014?

NICOLAS MARCHAND: We'll have a cinematographer giving lectures about the new products a few times a day. Kirk Neff, award-winning Canadian cinematographer in the News Category.

ARE THERE ANY FUTURE PLANS FOR SHAPE THAT WE SHOULD KNOW ABOUT?

NICOLAS MARCHAND: Exploring new markets, developing new solutions.

WWW.SHAPEWLB.COM



Cinematographer Kirk Neff.
Photo taken by Kim E. Welch,
HD Pro Guide Magazine.

SHAPE wlb Inc. is a Canadian camera support and accessories manufacturer targeting the broadcast, prosumer and consumer markets for almost 10 years now. With distributors and resellers in over 20 different countries around the world. SHAPE has established its ever growing popularity by offering a wide range of products and focusing on giving its clients a lifetime warranty on all CNC machined parts.



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Interview by Kelcie Des Jardins

A CONVERSATION WITH RON GARCIA, ASC

Ron Garcia, ASC began his cinematography lessons as a child, unintentionally studying light and color while looking at wild animal dioramas in the natural history museum. His first opportunity in film came working in the aerospace industry, attending Los Angeles' Art Center College of Design at night and raising a family. To this day Garcia has over 68 titles to his name, including David Lynch's feature film, "Twin Peaks: Fire Walk With Me" (1992), and television programs like "Hawaii Five-0" (2010-2011). In this exclusive interview, Garcia offers some of his insights to the world of cinematography, sharing his favorite cameras, tips, and experiences on set.

Q&A

HOW DID YOU GET STARTED IN THE FILM INDUSTRY? AND WHY CINEMATOGRAPHY?

RON GARCIA, ASC: As a fluke, while working at McDonald Aircraft, I met a guy who wanted me to help him make a film because I was attending Art Center at the time (1966). We made the film by trial and error. I had only owned a

Kodak brownie camera my parents bought me for my 12th birthday and shot very few pictures because I could not afford the film and processing. We went to Birns and Sawyers camera rental house in Hollywood, and they told us how to load the mags, read the meter and put the lens on. We shot for two days at an inboard motorboat race at Lake Havasue, came back to LA and figured out how to edit, attach the sound, and make a final

print. We shot with a 16mm Bolex wind and an Arri S hand held camera. We did rent a 1,000mm lens because it looked cool on the camera.

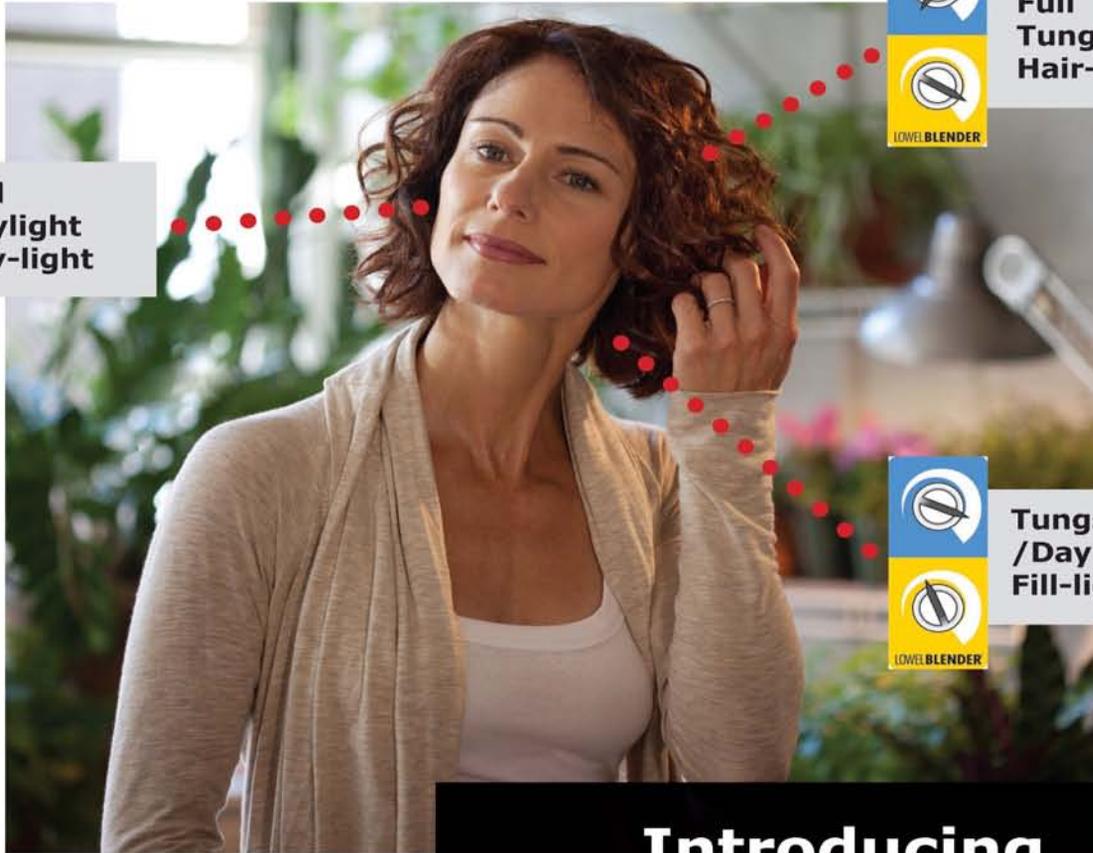
Needless to say that I truly fell in love with the camera. I knew nothing about it and knew I needed to learn all about photography. The only way was to become a filmmaker and teach myself cinematography, which is not the fastest



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way to learn camera or necessarily a good way to go. It took a lot of hard work and time to become a producer, editor, art director, writer, and then raising money to get to be able to hire myself out as a cinematographer and still feed my family.

Trying to stay in the business and follow my dream, I took any job in the industry that paid enough to keep up the rent and feed the family. I cleaned out flop houses downtown, built sets, works as a background extra, set construction, editing, key griping, prop master, special effects, set dresser, art director, writer, producer, an actor (once), sound effects editor, music editor, any thing that kept me in the game.

WHAT ARE YOUR FAVORITE CAMERAS?

RON GARCIA, ASC: I have only used the Sony F35 shooting "Numbers" (2008-2009), "Hawaii Five-0" (2010-2011) and the Arri Alexa shooting "Rizzoli and Isles" (2012-2013).

I was involved with the Arri Alexa, RED Epic, Canon C300, SonyF7 and F65 during the Producers Guild's "ICAS" (image control assessment series) with my colleagues at the ASC technical committee who photographed the series and controlled the color correction in final.

I think all the HD 2k/4k cameras have their idiosyncrasies and that they are tools with strengths and weaknesses to be considered in the demands of the production budget. As it stands right now the camera of choice for high-end motion pictures is the Sony F65. I think the Sony F55 is going to give the Alexa a run for their money in network broadcasts.

My favorite DSLR is the Canon 5D Mark II. It has a touch of all the good things that the HD 2K/4K systems have. A few years ago the 5D performed very well in both broadcast and low budget films. Now, by the time you rent or buy all the attachments for the 5D to make a film, you might as well rent a Canon C100, C300, a F5 or F55 for that end of

the production scale.

In 2010, I did use (2) 5D's exclusively shooting scenes in an episode of "Hawaii Five-0" for two days out of a five day shoot on the battleship USS Missouri. It cut right in with the Sony F35. I used it because it was small lightweight to hand hold for the low angle shots walking thru the ship and going up and down the ships ladders (not steps). The crew was whittled down to the camera crew and one grip and one electric because there just was not any room for more. I used the ships lighting and augmented it with one 2'x2 bank kino flo and a single 4' kino flo tube. That episode was "Ho'apono" (season one).

WHAT DO YOU LOOK FOR WHEN READING A SCRIPT?

RON GARCIA, ASC: When I read the script, it is always read more than once and in different stages of production.

STAGE ONE: *As a cinematographer, I usually get a script when my agent sets up a meeting with the producer, director and writer. I research the production team (writer, producer, director and production manager/line producer) in the IMDB to see if they know anyone I have worked with. If they have, I call those contacts and ask what kind of person they are. And then I look at the movies they have worked on so I can compliment them about their shows before they get to ask about my shows.*

STAGE TWO *(before the interview with the production team): I look for the "tone", meaning, what the script is trying to convey in "feeling". Is it melancholy, scary, a quest, a day in the life, etc... how does it affect me? I think about camera movement, shot angles, types of lenses and implementing those shots.*

STAGE THREE: *Before the production meeting, I go over the script in detail. Each scene is broken down by the 1st AD in shooting order (not script order). I look at the schedule of the day's work.*

Exterior Location: *Will a particular scene be best shot in the morning or afternoon? What kind of weather is it going to be and will I have sun or overcast or both? What direction do I want to shoot for a scene first? Where will the sun be at the time of shooting? Do I use a soft diffusion over the actors if I'm going to be in direct sunlight, or start with having back light from the sun? What colors are the actors going to wear?*

Stage Interiors: *What size is the set? How much height do I have to work with? How much room do I have to put lights outside the windows of the sets? Will there be enough of a difference in color to separate the skin tones and clothes of the actors?*

Location Interiors: *Same as above in many ways, but in addition: How much room do I have to mount light stands to put thru the windows, how many stories is the location? Can I get light through the windows?*

STAGE FOUR: *I go back through the script and make my equipment lists after listening to the producer, director and production designer during the production meeting. I draw out the sets and make a lighting and grip diagram as to what and where and when I want my lights to be. In this way the Gaffer and Key Grip get an idea of the amount of*



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equipment that has to be set up and transported to and from all sets and locations.

I also break down the camera equipment list on what, where and when I need certain cameras and lens choices. This list gives the production manager a good start to what is going to be rented and used per shooting schedule. If you show the production you are prepared and have a plan to start with they don't argue much as to why you need this equipment and pretty much get what you want because you have done your homework.

HOW DO YOU CHOOSE YOUR PROJECTS?

RON GARCIA, ASC: As a cinematographer I have to get the job first. It's very competitive out there. They choose me first and if I get the job, I choose if I want it or not. Because I've directed three features and 17 television network shows, produced five feature films, edited for 8 years and art directed five films, I automatically think of the project as a "story teller" first. I get a sense of production value, budget and length, location or locally shot.

After the interview and if I get the job I then decide if it will be a hard grind and too much political work that takes away my focus on cinematography or hard work but enjoyment in working with the personalities of the production team, producer, director and production designer).

Sometimes it's both and you have to remember that you are the only one, as an individual artist working on a collaborated art form, that can make that decision.

WITH A FILM LIKE "TWIN PEAKS: FIRE WALK WITH ME", QUITE A FEW SCENES WERE SHOT OUTDOORS OR IN VERY DARK AREAS. WHAT WAS IT LIKE TRYING TO LIGHT THOSE

SHOTS AND HOW DID YOU ACHIEVE DESIRED EFFECTS?

RON GARCIA, ASC: During the shooting of FWWM, there was a night that David wanted the two actors who played Laura and Bobby meeting up for a drug deal in the black forest to be naturally dark. David really likes dark scenes. He wanted the actors to use flashlights and nothing else [no motion picture lights to light up the forest]. I knew he wanted me to be able to shoot the scene using only those two flashlights. Knowing that the film stock would not be able to lift the values on the unlit side of their faces if the actors did not shine the lights directly onto each other's face all the time, I thought as the cinematographer the scene would become a radio show and now a motion picture not being able to see anything. But this was a David Lynch movie and David being David wanted what he envisioned.

I started to take away some of the bright HMI 1,200 pars I had placed before it became night to get a jump on the night's work. Each time I said I was ready, David said it was still too bright. I explained to David that the film would start to get grainy if I did not at least have some ambient light in the background and foreground. He still insisted I take away the background lights that fell on the trees. This went on until I was left with one 1,200 HMI par that I was bouncing into a pine tree branch that gave off some foreground fill light and David was still wanting it pitch black and asked me, as an artist, "Where is that light coming from?" I paused for a frustrated minute and responded, "the same place your music comes from!" He paused for a minute and then let me have the light that bounced off the tree. So a funny compromise between David and I was reached. I still talk about that night to all my young camera assistants.

YOU ARE ALSO CREDITED FOR THE PILOT OF TWIN PEAKS. DO YOU WORK DIFFERENTLY ON TELEVISION PROGRAMS THAN FEATURE FILMS?

RON GARCIA, ASC: Yes, and this goes back to the example about the light in the dark forest. Using film, I had to fight for the ambient light because of the projection in a dark theater. If that scene was for television broadcast I would have let it go or use very little light that didn't bother David Lynch. In today's world the best thing about shooting digital is the strength of the wide dynamic range of the high end cameras in the shadow areas.

WHAT DO YOU THINK IS THE BIGGEST CHALLENGE FOR THE CINEMATOGRAPHER/DP?

RON GARCIA, ASC: The hardest thing for me as an artist is to remember the motion picture business is a business of collaborated effort from all departments in the production of film making. The DP is not the soul creator of photography any longer. Digital has opened up the jar of "secret sauce" we used to have because of lab work in color and density control through various processes. No one knew what that process was so they relied on the DP to what they were doing on the shooting set. Now everyone sees the picture in real time on the set and it's open to the public for evaluation right there and then before we DP's get to manipulate it.

The good news now is with the emergence of the on-set LUT (Look Up Table) you can apply to the director's monitor and the dailies to the studio. Soon with the completion of the Academies "ACES" (Academy Color Encoding Specification) and the ASC/CDL (American Society of Cinematographers Color Decision List) the DP will have a lot more influence than we have had in the last 10 years of analog/film (telecine) and digital photography.

WHAT ARE THREE PIECES OF ADVICE YOU WOULD OFFER CINEMATOGRAPHERS OR FILMMAKERS JUST STARTING OUT?

RON GARCIA, ASC: Firstly, the very first impression of a job interview they remember is when you walk in

the door and how you're dressed, so always dress accordingly. I have a few casual, fashionable shirts which makes the production team feel comfortable with me (hopefully). Most producers usually counter-dress. They wear nice tee shirts with a lightweight jacket or over shirt and jeans with fashionable tennis shoes or interesting leather shoes, it's like a standard uniform. That's because most producers now days are writers or actors to begin with.

In the last 44 years, I have never had an interview with a production team that interviewed me that wore a suit! And I

have never worn a suit at an interview except when I was interviewed to be accepted into the ASC at the Club House in Hollywood. I take that back-- once I did wear a nice suit coat, white shirt (no tie) and dress slacks to an interview with Diane Keaton when she was the director looking for a cinematographer. Secondly, the thing you must convey in your work is the love you have for cinematography or whatever position you have chosen for yourself. When people look at your work it must have a quality that stands out from the competition and it's the love you have for film making that will shine through.

Thirdly, take any job in the industry that you can that keeps you in the game so people know you are around and available and that you are a hard worker and love what you're doing. Work in various jobs if you can or keep your eyes open to everyone's job. You might change your mind and change direction in what you want to accomplish. It's just like going to college. Students change their major before they graduate, or change in grad school.

And as Alfred Hitchcock once said to young filmmakers: "Stay out of Jail!"

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By Camille Haimet

REMAKING A CULT CLASSIC

LIGHTING INSIGHT

from Aaron Morton

One piece of advice I got when I was starting out was, 'see it before you light it'. If you can imagine how you want the scene to look, it can give you confidence about what it is you're going for in terms of lighting. Try to imagine it and visualize it in your head. Short of that, keep shooting as much as you can. The more you do it, the better you get. It's a series of thousands of little decisions and each one has value.

Attempting to remake a celebrated film into one that is fresh and contemporary is no easy task, to say the least. These challenges are enhanced when that film is considered a staple of its genre, such as Sam Raimi's 1981 horror cult classic, "The Evil Dead". In order to find out how to shock a contemporary audience that is already familiar with the story, create astounding gore effects, and deal with the challenges of horror movies in general, StudentFilmmakers Magazine talked with the film's cinematographer, Aaron Morton, and editor, Bryan Shaw about their experiences and tips on Fede Alvarez's modern remake.

Q&A WITH CINEMATOGRAPHER AARON MORTON

Q&A

WHEN WORKING TO CREATE THE LOOK AND ATMOSPHERE OF "EVIL DEAD", HOW MUCH CREATIVE FREEDOM

VERSUS DIRECT INSTRUCTIONS FROM THE DIRECTOR DID YOU GET?

AARON MORTON: I had a lot of creative freedom, but I don't want to distance myself creatively from the director because it's his intent that we need to feed, if you know what I mean. There was certainly creative freedom, but I worked closely with Fede Alvarez to craft the look of the film.

HOW DID YOU MAKE THE MOVIE FRESH AND ORIGINAL WITH YOUR PERSONAL SENSE OF AESTHETIC AND FILMING TECHNIQUES, KNOWING THAT IT IS A REMAKE?

AARON MORTON: It's partly just the fact that we're making it in a modern era with a new script and a new cast. Aesthetically speaking, it was probably just a bit more polished. I mean, we had more time and more money than Sam [Raimi], Rob [Tapert], and Bruce [Campbell]. I guess we were also looking to make a terrifying movie rather than anything that had laughs built into it. It's a pretty harrowing film. In saying that, I laughed the whole way through, because it is so graphic.

WHAT DO YOU FEEL ARE THE PARTICULAR CHALLENGES OF WORKING ON A HORROR FILM? HOW DID YOU OVERCOME THEM?

AARON MORTON: I guess one of the

biggest challenges of a horror movie is the darkness, and just knowing how far you can take it; and being selective with what you're showing the audience. Another important aspect for me was trying to create an overall foreboding tone, I suppose. Pretty much as soon as the scene with the words being read from the book and the demons being called takes place, I wanted to up the ante in terms of that foreboding feeling. From that point, I tried to shift gears in terms of the intensity and how dark the movie was.

SINCE THE GENRE DEALS HEAVILY WITH THE PSYCHOLOGY OF DIFFERENT CHARACTERS, HOW DO YOU MAKE THIS COME ACROSS WITH YOUR FILMING TECHNIQUES?

AARON MORTON: There wasn't necessarily any signature that we gave to each character. We didn't have visual roles that we'd apply to each of them, for example. But I was certainly aware of Mia's journey throughout the film. We did sort of want to have the camera focused on her and have the lens stay in close quarters with her most of the time. I would say it was mostly based around Mia's character.

WHAT WAS YOUR WORK WITH THE VFX DEPARTMENT LIKE?

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AARON MORTON: It was great, and actually quite minimal. The only real visual effects were the washed out river, and some little fixes here and there because all of the gore effects in the movie are in camera. Whenever possible, we used practical effects, which took a lot more time and was a lot more challenging to come up with; especially in the scene where Natalie cuts her arm off. She's sitting on the floor in the kitchen and she does it with that electric knife. That was a fun one because you see her pick up the knife, push in, and you see it dig in to her arm; it's pretty nasty. That shot took most of a day. It took a long time because of all the resets and just getting her in the right position. That was important because the trick either worked or didn't work based on her body position. It was really critical where she was when she started coming around. Doing the effects in camera added time and complications to everything, but it was really worth it.

WHICH PARTICULAR CAMERAS DID YOU USE FOR "EVIL DEAD"? WAS THIS DIFFERENT THAN THE CAMERAS YOU USUALLY PREFER TO WORK WITH?

AARON MORTON: We used the Sony F65. I'd never used it before because it had only been out a couple of months. It's a very new camera, but it was fantastic.

WHAT DO YOU FEEL IS THE MOST SUCCESSFUL SCENE IN THE FILM, OR THE ONE YOU ARE MOST PROUD OF SHOOTING?

AARON MORTON: The arm one was really good, but I do quite like the whole finale with the blood rain. I think that it worked quite well. I really like the final images with Mia digging the chainsaw into the demon's head and the burning house in the background. In terms of whole sequences, I definitely like that last one the best.

WHAT NEW PROJECTS ARE YOU CURRENTLY WORKING ON THAT YOU CAN SHARE WITH US?

AARON MORTON: I just finished a show called, "Orphan Black". It is now airing on BBC America. The first episode was very well received and The Hollywood Reporter rated it at number 1 above "Game of Thrones" and "Walking Dead" the weekend it aired.

CONTINUED ON PAGE 48



"We Focus on Your Shoot"

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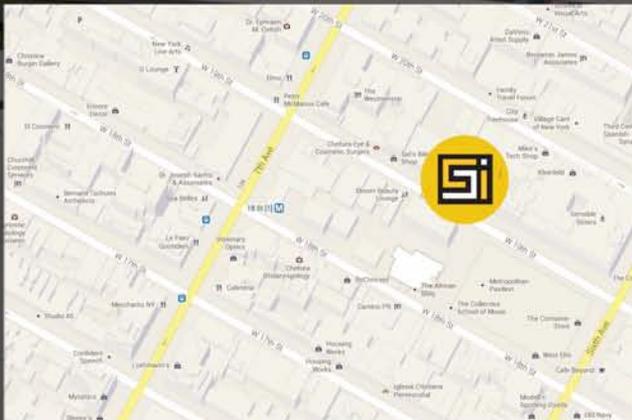
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TELL US ABOUT SOME OF YOUR RECENTLY COMPLETED PROJECTS AND CURRENT PROJECTS THAT ARE MORE IMPORTANT TO YOU?

MICHAEL AKU RODRIGUEZ: Well, I just finished two documentary films, one feature film that is in per-production, and one documentary that is in filming. One was a Documentary film I D.P. and produced in Puerto Rico called, "La Gran Falacia", with a team that I helped shoot there first film and worked out very well. Second was Documentary project that I help with sound in Fort Worth, Texas, called, "I See World Peace", and third is a action film by Director William Kaufman called, "Burning Sun" (pre-production). My important film that I'm currently directing, producing, editing, composing, and D.P. on that involves the understanding of art and the healing gifts it creates within oneself called, "The Walls Of Peace".

My work has pushed me more to projects that involve social change and justice. I'm currently on two more projects that I will be Directing, Producing, Composing, Editing, and D.P. that will be shot on RED cameras that I can't really talk about now but, it all has to do with history and the change it has created for us all. Second is a feature-length film that's Sci-fi, mystical, and based upon true events. Being Native American and Spanish, I was raised in a native spiritual upbringing that allowed us to be free in understanding our surroundings and our path too ourself, others, and Nature. I'm in the process of shooting a short film (to be continued) and also looking on creating a web series on a story about four peoples lives in the mid west.

My very important project that I created was a organization called, "Zoom On A Star D. Stories" that teaches digital media technology to engage at risk youths-predominately from low to moderate income households, in creating stories told through digital images. The organization received a NEA: National Endowment Of

The Arts-Education Arts Grant; that focused on this medium of "The Arts"(film, art, photography) in teaching children and teens in looking at life in a different view with the tools of digital images.

YOU OWN A RED SCARLET AND RED ONE MX. TELL US ABOUT WHAT CAMERAS YOU OWN, RENT, AND WORK WITH.

MICHAEL AKU RODRIGUEZ: Yes, I've always been a RED fanatic and have admired its abilities in the field. I own a RED ONE MX, Scarlet, and some Canon 5D M2s and 7Ds. I've also been looking on getting a second RED ONE MX and an EPIC to add to the RED arsenal pack...

I played with a lot of cameras like the Alexa series from Arri, Sony CineAlta-F5, Canon C300, C500, Blackmagic Cinema Camera, but it never gave me the sense that the RED has on the quality of its actions in the field and with the constant flow of new equipment coming in every year you have to not just look at the quality but the durability of the camera. Don't get me wrong, there is some great stuff coming out and some that I would stay away from.

I also rent my gear and offer my services when I'm not on production projects. These days in the industry you have to find different avenues in keeping income and funding coming in.

TELL US ABOUT WORKING WITH THE RED SCARLET AND RED ONE MX.

MICHAEL AKU RODRIGUEZ: I've had a lot of cinematographers who would not touch a RED camera and some who just can't stand them. Personally RED has never let me down in the years I've used them. Working with the Scarlet and RED ONE MX has been a learning experience as everything is and the two cameras do have their own abilities except the Scarlet lighter camera - that's the only advantage really, until you can get your hands on the Dragon upgrade for

Scarlet (which I haven't purchased yet) that will give the Scarlet the push it needs to be in the big leagues but you're looking at a hefty price. The RED ONE MX has been a work horse for me and has always delivered its weight, better performance in general, access to cheap media via hard drives which have never failed me, not once. R1Mxs are still used on some high-end sets. R1Mxs has wider field of view (4K:16:9 is more field of view and more resolution than 4K:HD) and many totally useable slo-mo modes. You could not show up to a top-budget production with a Scarlet except as a b-cam. Many Hollywood productions still use the R1Mx because of the durability and ability to handle the project.

I also should note that another aspect that I liked about the Scarlet and REDCINE-X was the ability to export high-resolution stills. With the Scarlet, you can shoot 5K motion at 12 fps and export 5120x2700 images, which are more than enough for print work. The advantage for still photographers (I'm a photographer myself) is the sheer volume of frames one gets from shooting motion pictures rather than stills. It's interesting to see how convergence has gone full circle—before we had still cameras that could shoot video and now we can use motion picture cameras to capture high-quality stills.

ARE THESE CAMERAS EASY TO LEARN?

MICHAEL AKU RODRIGUEZ: You know, it depends on the person and the back ground they have in the film industry. For me it was easy to learn because, I have always been passionate about filming, equipment, and the industry so I could spend days learning about something new and love it. If you have the willingness, effort, and passion to learn about anything then it takes the will to move forward with it.

TELL US ABOUT THE WORKFLOW, AND WHAT ARE SOME ADVANTAGES WORKING WITH THE RED SCARLET AND RED ONE MX?

MICHAEL AKU RODRIGUEZ: Every year something changes and you have to buy something for the component that didn't fit our the upgrade that needs to be installed so the workflow advantage is great in some cases just the budget in upgrading your system is the real question. The Scarlet workflow is about the same, except buying more gear like the RED Station Mag, RED Station Base, and REDMAG SSD at \$1250 for a 128GB or \$3900 for a 512GB and with new editing systems coming out, it's only going to get easier.

HOW HAS HD TECHNOLOGY CHANGED, INFLUENCED, OR IMPROVED YOUR WORKFLOW AS A CAMERA OPERATOR?

MICHAEL AKU RODRIGUEZ: Over the last decade, wagon trains full of new cameras, sensors, compression schemes and production protocols have appeared in the production environment. The roles of key players - cinematographers, producers and editors among them have undergone significant shifts in the once-orderly flow of content from production to post. HD came in as a secondary thing. Nobody wanted to jump the wagon or take the risk that it would evolve or fadeaway. It seemed foreign and Film was rolling it in. Now HD is the flow of our tomorrows. You know every year I hear about the "next big thing" and how it can be utilized in the field. It seems now you have to be careful with what you purchase and how you do that because, in five years the technology will be the past. So HD technology to me is a great thing if you know what you're buying and a negative if you don't.

It's amazing what we can do in post now that we could not a decade ago. We can take portable systems out in the field that do exactly what we need it to do at affordable budgets, 4k recorders that do everything plus save hours in post production, and I could remember cameras weighing 25 to 30 pounds compared to the cameras now. We can basically put them in any tight spot allowing a cinematographer to be more creative with her or her craft. It was unheard of to edit on a laptop or be able to afford your own editing system. Time has been cut in half with HD technology and looks like its evolving in a rapped speed that may (will) change the world again as we know and hopefully at a great price.

TELL US ABOUT YOUR POST PRODUCTION PROCESS.

MICHAEL AKU RODRIGUEZ: I capture RAW files to 2 REDMAG 1.8-inch drive and transfer the 4K files to my Mac Pro with a

REDSTATION. Working with 4K, you have to take several more steps to prepare for inputting into a nonlinear editing system compared to a C300, which uses the XF codec that can be used natively with any NLE. In terms of viewing and working natively with 4K files I use a RED ROCKET. Once on my Mac Pro, I transcode the 4K files to ProRes 422 (1920x1080) files in REDCINE X to be input into Final Cut Pro then stored in to a 32TB rack-mount system. The downside to working natively, is that even with a fast machine, performance can be sluggish. This is magnified when dealing with a large quantity of footage, such as a feature film or other long-form projects. The native clips in your editing project are encumbered by the overhead of 4K compressed camera files. On location I use the 2 Magma ExpressBox 3T with a WrapDrive, Raid Controller, and RED ROCKET into a MacbookPro and 3 G-Tech 8TB drives. The ExpressBox 3T and RED ROCKET allows playback ability of 4K files in different resolutions and real-time speeds in full 4K quality, and speeds up the transcoding process, as well.

DO YOU EDIT YOUR OWN FOOTAGE, AND DO YOU WORK WITH DITS AND OTHER EDITORS?

MICHAEL AKU RODRIGUEZ: I basically do it all as in doing it myself, working with DITs, and side by side with editors depending on the project and budget but, I like to keep it with a team that helps create the vibe rather than dissolve it. I do edit my projects and when working on location I do my own logging. I realize that everyone has their own way and style of editing which brings a wider range to the table. I prefer to do it myself because some editors don't really grasp the feeling or see your vision in creating the story told by yourself. I do have 3rd part editors come in and give what I call positive criticism. I look at filmmaking as a format of always finding the best shot, angle, and most of all the vibe of which the script is reflecting the caricature.

WHAT HD TECHNOLOGIES ARE IN YOUR EDITING SUITES?

MICHAEL AKU RODRIGUEZ: My editing suite consist of 6 Kangaroo Road Case Rack mount systems with 2 Mac Pro's, 2 REDRocket cards, REDRocket Breakout box, AJA Kona Card, 4 Dell UltraSharp U2410 (24") Monitors, 2 Evo 6G 16 Bay 32TB rackmounts, Blackmagic Design Studio Videohub Router, Apogee Ensemble (I'm a composer) digitally audio interface, and 2 Furman Sound PL-PRO C Power Conditioners. My intent was

to invest in to something that would last a couple of decades before technology took its next "Techleap."

IF YOU COULD SHARE THREE TIPS RELATED TO HD OR HD SHOOT TO POST WORKFLOW, WHAT WOULD THEY BE?

MICHAEL AKU RODRIGUEZ: For these and other reasons, I still advocate an offline-online procedure, rather than native editing, when working on complex RED projects. You could convert to a high-quality format like ProRes 4444 or 10-bit uncompressed at the beginning and never touch the RED files again, but the following workflow is one designed to give you the best of all worlds – easy editing, plus grading to get the best out of the raw files. There are many possible RED workflows, but I've used a variation of these steps quite successfully on a recent indie feature film – cut on Final Cut Pro 7 and graded in Apple Color. My intent here is to describe an easy workflow for projects mastering at 2K and HD sizes, which are destined for film festivals, TV and Blu-ray.

When you receive media from the studio or location, start by backing up and verifying all files. Make sure your camera-original media is safe. Then move on to RED's REDCINE-X PRO. There is no need yet to change color metadata. Simply accept what was shot and set up a batch to convert the .r3d files into editing media, such as Avid DNxHD36 or Apple ProRes LT or ProRes Proxy. 1920x1080 or 1280x720 are the preferred sizes for lightweight editing media.

IF YOU HAD TO CHOOSE, WHAT ARE 5 HD TECHNOLOGIES THAT YOU CAN'T WORK WITHOUT?

MICHAEL AKU RODRIGUEZ: I would have to say my RED cameras is number one, two, and three. Without these girls, my life would vanish. Fourth - I would have to say, Blackmagic Design Studio Videohub Router. I've been able to patch anything and everything into this and more. It's been a life saver in my book and out in the field. Fifth - would be my iPads that basically carry every film production app you can think of and I use them as monitors when needed.

You know it's beautiful to see how HD technology has evolved into what it is today and it's exciting to see what it will do in our tomorrows.

By Scott Essman

SHOOTING WITH THE SONY F3



Q&A

WHAT WERE THE MAIN TECHNICAL REASONS YOU CHOSE TO SHOOT "TRANE AND MILES"

WITH THE SONY F3?

BRYAN GREENBERG: At the time the F3 was the latest Sony digital camera with features that were compatible with higher end cameras. Its new brother, the F5, has since replaced the F3. I'm going to be shooting with the F5 on the upcoming documentary "Crash Crouse" about the raise and fall of the auto industry. Technically, the F3 allowed me to make choices in the menus that gave me control over the "look" that I wanted for "Trane and Miles" in camera. Also, I was able to use the same lens I have used when I was shooting projects on film.

HOW DO THE LENS SELECTIONS AND AVAILABILITY FOR THE SONY F3 DIFFER FROM THE OTHERS?

BRYAN GREENBERG: The F3 has a PL mount which is the standard lens mount found on most cameras. They also have lens adapter that will allow you to use most of the lenses that are available today.

YOU SHOT "T&M" ON TWO CARD SYSTEMS - A PRIMARY ONE AND AN AJA AS A BACKUP SYSTEM. CAN YOU EXPLAIN HOW THOSE WORK AND IF THEY ARE DIFFERENT - AND WHY DID YOU ADD THE AJA SYSTEM?

BRYAN GREENBERG: We used the AJA so that we could have better color resolution. The AJA allows us to up res the quality of the picture. The on-board card was our backup and allowed us to playback the image for review.

WHAT APPROACHES TO CAMERA SETTINGS, FILTERS, LENS SETTINGS, DIFFUSION, OR SPECIAL LIGHTING TECHNIQUES DID YOU USE TO CREATE THE 1959 PERIOD

LOOK OF THE FILM?

BRYAN GREENBERG: I really want to give this a look that would put you back in time. I didn't want to just shoot this in black and white. I wanted to push it a little further. What I did want to do was to create a look that had the flavor of black-and-white but felt like you were looking back at a moment in time, a fuzzy memory, a dream, real but unreal. When you have a camera that provides a lot of features, you have the ability to create a look in camera. I reset the color temperature to create the tone that would help capture the look of the 1950s that I wanted. Also, I tried something for the first time to see what the results would be. I wanted to soften the image, take away any hard edges and open up the blacks a little bit. To achieve this I first started with the lens. I used an old school 25mm to 250mm Cooke lens. I love the glass on the older style lenses. They don't have the super sharp look of some of

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By Scott Essman

the newer HD lenses. With the 25mm-250mm Cooke on the F3, I was able to look at the monitor and compare my filters that I use on film shoots. This gave me a chance to see what would be the best fit for what I was going for. I started with Tiffen diffusion filters and discovered they were too light. To my surprise, I ended up using a Tiffen fog 4. This type of filter would be way over the top on a film camera. But,

YOU SHOT THE ENTIRE 19 PAGE SCRIPT IN TWO DAYS WITHOUT GOING OVER A BASIC WORK DAY. CAN YOU DESCRIBE HOW THAT WORKED ON SET?

BRYAN GREENBERG: It was a bit of luck that I was able to bring on my top crew guys. First, Cameron Cannon has been my A.C. for over 10 years and also works as my camera operator. He

make ones out of black wrap that would be a perfect fit. I think most importantly is we are all very passionate about our work and enjoy working together. Also, I'm a "boots on the ground" person. If you are on my crew, then you are going to be working. I keep it moving. Without my crew I wouldn't be here talking with you.

FOR FILMMAKERS WHO MIGHT



wow, it really worked well for me. It gave the highlights a little bloom and created a little softness to the overall image. It was just what I was looking for. I would have never thought of going with anything so heavy, but it really worked well. The rest of the look I was going for was filled in with the lighting. I used a lot of C.T.O. of various degrees over the lights. With that combination I was able to create the "look" and really see what I had before any post-production work.

YOUR DYNAMIC WITH YOUR CAMERA CREW (YOU AS DP PLUS AC, GAFFER, AND KEY GRIP) MADE THE WORKFLOW SO SMOOTH.

is my right hand, knows how I work, knows how to set up the camera to my spec, and has my back. I expect a lot from my A.C., and Cameron has never let me down. Next, my gaffer Mark Shelton, who I met while doing effects work on "Titanic" is excellent. I have brought Mark on many of my shoots. He knows how to light to my style and is very clever when it come to "making it work". The three of us have done a lot of work together so we have a good short hand that saves a lot of time. My key grip, Frank Garbutt is new to my crew but has more than proven himself to me. He is the type of person that is always thinking. When we didn't have enough flags, Frank would custom

WANT TO EXPLORE USING THE F3 FOR THEIR OWN FILMS, WHAT IMPORTANT FACTORS SHOULD BE INCLUDED IN THEIR DECISION?

BRYAN GREENBERG: That's an interesting question because in today's world of cameras there are really only two choices. There are the Sony F3 and F5, the Canon C300 and C100, and I am sure there are a half dozen more cameras out there with the same basic spec: 4:4:2 color spacing 8 bit cameras all under the \$15K range. They all create magic and they work well but can lack the punch of higher end cameras. The next level are the REDs like the Epic, the Arri Alexa and

By Scott Essman

the Sony F55, plus I'm sure there are a few more cameras I'm missing with the same basic set-up. These cameras shoot 4:4:4 10 bit for maximum results and sell for around \$30K. If you have the budget and going for something that will be on a big screen these cameras would be a better choice. The other big consideration in picking a camera is the workflow and how it will impact the post-production.

FOR THE INDEPENDENT CINEMATOGRAPHER, ARE THERE ANY KEY TECHNIQUES TO USING THE F3 TO ITS MAXIMUM VALUE WHILE SAVING THE ALL-IMPORTANT ELEMENTS OF TIME AND MONEY IN A TIGHT SCHEDULE?

BRYAN GREENBERG: Every cinematographer has their own style. For me, I look at the camera as an instrument. It is not what the camera can do — it's what you can do with that camera. There are no buttons on the camera that save time or money; it's prep, anticipation, the people you work with, and the ability to work ahead. That what saves time and saves money.

YOU HAD A DOLLY THE ENTIRE WEEKEND FOR THE "TRANE AND MILES" SHOOT. HOW AND WHEN DID YOU USE THIS MOST EFFECTIVELY?

BRYAN GREENBERG: We had a Tripod dolly. I was very happy to have it, but there are better dollies out there. Skateboard dollies are easy to make and work really well. But this was free, so we made it work. I shot as much as I could with the tripod dolly. It allowed me to create movement. Plus I could work at the long end of the lens and also have some movement in the shoot. I was able to use the dolly to push in and pull back to create transitions. Also, in the wide shoots I was able to slowly dolly right to left and back. This is one of the best ways to create production value on a small budget. Most of the time on low-budget shoots, the best dolly is the doorway dolly — very cheap and very easy to use.

WHAT OTHER DIFFERENT



PROJECTS OF YOURS HAVE BEEN BEST SUITED TO THE F3 AND WHY?

BRYAN GREENBERG: On my next project, "Crash Course," we really spent a lot of time talking about cameras and doing the research. I settled on the Sony F5. Why? Because at the end of the day, it fit the budget, could handle the lens I want to use, and has better workflow than some of the other cameras for our postproduction. Plus, after using the F3, I felt more comfortable with what I can do with the Sony F5.

WHAT TECHNICAL ADVANTAGES TO SHOOTING ON FILM WOULD YOU LIKE TO SEE INCLUDED IN THE WORLD OF DIGITAL VIDEO?

BRYAN GREENBERG: Two things. First, as crazy as it sounds I really miss an optical viewfinder. That's left over from shooting on film. At some point, you are lighting with your eye and seeing that frame through a viewfinder without the enhancement of the digital world; it could show me real world lighting and contrast.

The second thing is that for the A.C. or any upcoming cameraperson, be it a DP or camera PA, please learn photography. I cannot state how important it is to know the basics. If you want to be a professional, you have to know what photography is all about. Without having that knowledge, you will never be able to set yourself free to really explore, experiment and sleep at night.

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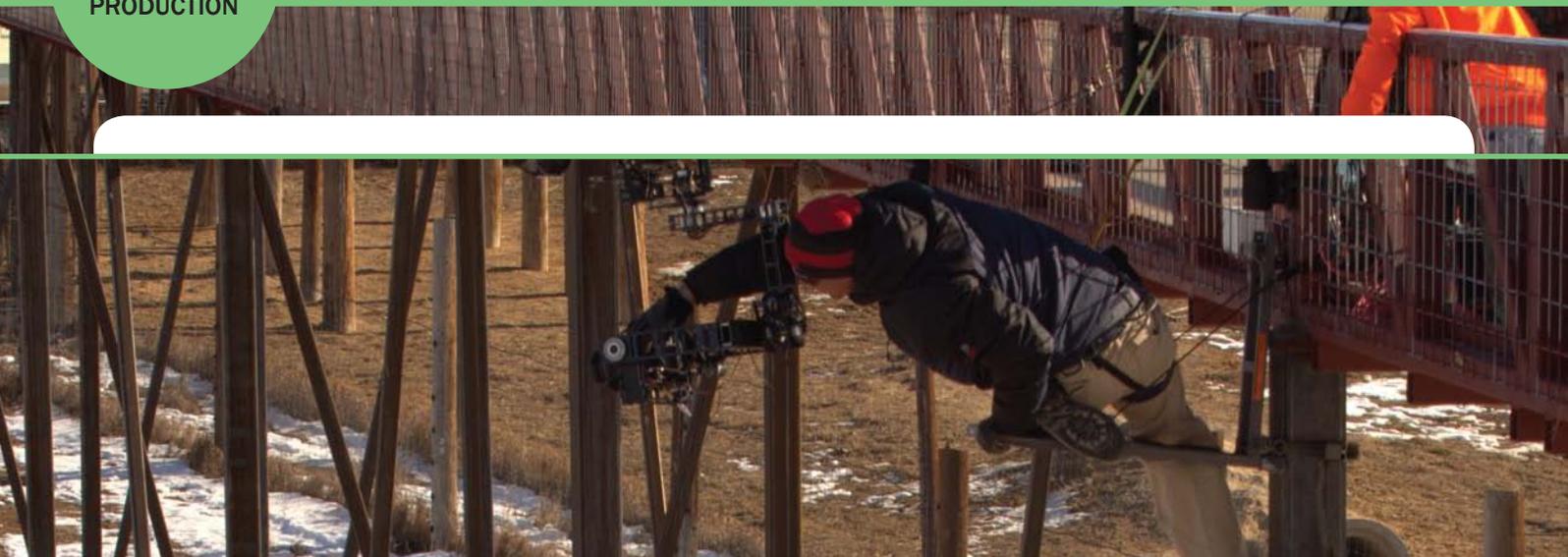
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GET THE BIRD'S EYE VIEW WITH CONDORCAM

Q&A

IN 2008, YOU CREATED YOUR FIRST CABLECAM SYSTEM, WHICH WORKED ON MANY

PRODUCTIONS, BUT IN 2010, YOU REDESIGNED AND ENHANCED YOUR VISION BY CREATING CONDORCAM. COULD YOU TELL US MORE ABOUT CONDORCAM, YOUR WORK, AND THE SERVICES THAT YOU OFFER?

JESSE PLACKY: Condorcam is an A to B cablecam system that can reach spans of 1,200 feet and speeds of 40+ mph. Our 3 axis robotic head can hold an array of cameras, from the RED Epic to the Arri Alexa. We have covered action sports, have worked on commercial and feature film work. In 2012, I dissolved my former production company Trevnu Productions and brought all those services under one roof and CC brand. The added services to Condorcam are now RF services, RAILcam, Underwater DP, Steadicam, POV specialist and now

production development with the CC-slider and CC-drive.

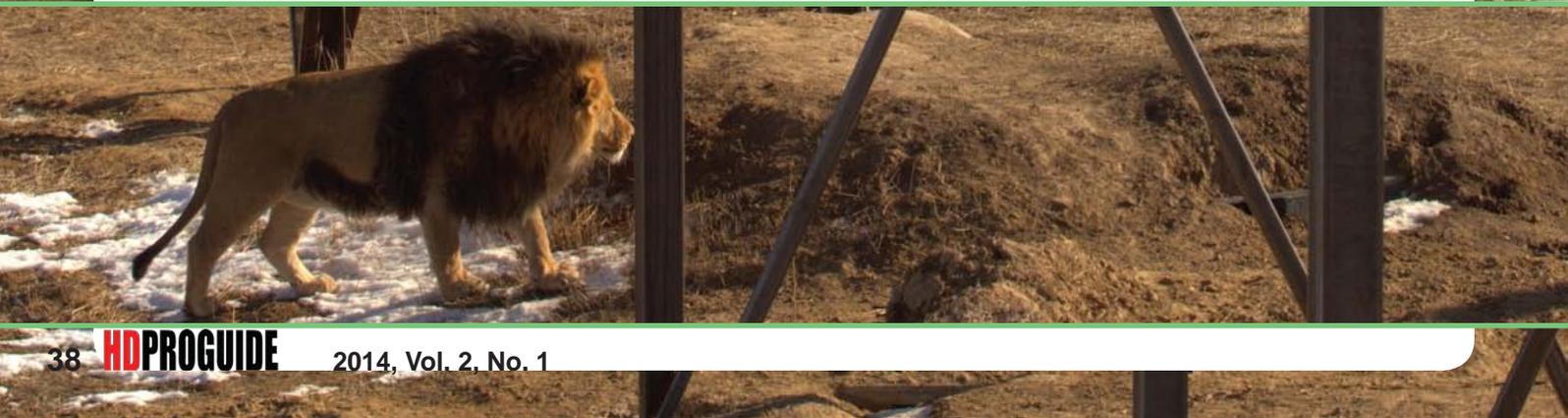
YOU'VE SHOT FOR TELEVISION AND FILM. COULD YOU TELL US ABOUT SOME OF THE SIMILARITIES AND DIFFERENCES SHOOTING FOR TELEVISION VERSUS FILM IN YOUR EXPERIENCE AND CAPTURING POV ANGLES AND SPECIALTY SHOTS WITH CONDORCAM SYSTEMS?

JESSE PLACKY: The similarities when shooting for TV or for a Film is the creative process. Talking with the director and finding out what is the expectation or vision of the shot. Then we determine the best flight path suited to the event or shoot with taking in all logistics involved, what will we use for Anchor points, are we getting in other camera angles, are there any obstacles in the way, etc.

There is a pretty big difference between shooting for TV or shooting

for Film, especially when TV is a LIVE event. When Condorcam is shooting for live TV or a live webcast, we're usually covering a section of a course or the whole course. At that point, we are capturing a broad spectrum of the action, keeping the subject in frame and tracking along side them. We're considered the "game" camera; taking in the whole perspective of the event. It's a dynamic way to engage the viewer, along with the beauty shots we are used for coming in and out of commercial breaks. If the event is not live for TV and we're covering action, we're usually let free to get creative, try different things, like focal lengths, leading or following subject, switching directions and banking as many different creative angles as possible within that flight path.

When we're shooting for a film or commercial, we are brought in for a specialty shot. Usually the director





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*Jesse with Whales.
Photo Credit: Aaron Chang.*



had a vision of a camera move and we're brought in to execute it. We have done film work where we've taken a whole day to set up a shot and have done two takes, then we strike the system. The big difference is in TV we're usually following action for hours, trying new angles, the production wants to get their money's worth. In film work, shooting times can be so tight, we often don't have time to sell the director on other looks, they got the shot they need and are ready for a set change.

WHAT MAKES SHOOTING FOR TELEVISION UNIQUE TO SHOOTING FOR FILM IN YOUR EXPERIENCE?

JESSE PLACKY: I find with TV there is a stress and excitement of getting the shot or being prepped and ready to go when the director says, "Take Condor". Being ahead of the next move and ready for anything is the name of the game in TV. There are a lot of surprises and unpredictable shots we've captured all by being at the right place and time. With film work, shots tend to be a little more scripted, which is awesome when it all comes together. When we take the time to script shots out, we can get our camera in pretty tight places and reveal from tree branches or through window frames.

CAN YOU SHARE WITH US SOME OF THE INTERESTING AND UNIQUE THINGS THAT ARE INVOLVED IN THE FLOW AND TECHNICAL SIDE OF LIVE TELEVISION AND EVENTS, AS IT RELATES TO CAPTURING POV ANGLES AND SPECIALTY SHOTS WITH

CONDORCAM SYSTEMS?

JESSE PLACKY: Setting up the Condorcam cablecam system, we usually have a set day or sometimes 2 set days depending on the production. I always like to inform people, having a cablecam on a production is 80% rigging and 20% operation. If the system is not properly anchored or the person setting it up doesn't know their limits on loads, there can be catastrophic problems. Each job we do is different and has its challenges, I think that's why I'm drawn to this work. When working with a live TV production, it's one more element of set up. Getting our signal back to the truck can be a challenge sometimes. We operate the Condorcam system from one of our anchoring points, and sometimes that's not always the closest area to the truck. Getting the continuity between the truck and our operations area can be a challenge, like our comms and a program feed back to us so we can have a reference of the show. It's one more element of the production that has to be thought out.

IN ADDITION TO AERIAL CINEMATOGRAPHY AND PRODUCTION, CONDORCAM SYSTEMS AND SERVICES ALSO INCLUDE CAPTURING POV ANGLES AND SPECIALTY SHOTS USING STEADICAMS, SLIDERS, AND MOTORIZED DOLLIES. CAN YOU TELL US MORE ABOUT THE CC-SLIDER AND CC-DRIVE?

JESSE PLACKY: Condorcam has expanded its services over the years and we find that every specialty shot we cover, from Jibs to Steadicams, it helps us

understand how to use moving imagery into a project. The RAILcam was created because a client had asked us to make it, the director wanted a dolly with a robotic camera, but could have your classic dolly op and grip pushing behind, the venue was too small. We took our knowledge from the cablecam and moved it onto rails. To be honest, it was a harder product to develop, because the rails had to be inlined with precision so the connections were smooth. After using it on a few shows, I saw a need for this product for Concerts, Fashion Shows, and even conferences. Being low profile, it can sit directly on the stage and not block anyone's view.

After I made a few products, the engineer in me came out and Condorcam has knocked out a couple products last year. It all started with a bet actually. My buddy was looking at sliders on the market and he couldn't find one that had it all, he turned to me and said, "I bet you can make something better." So the CC-slider was born. I made it for him, it had everything he was looking for, travels easy, can be mounted to almost anything, does video moves and time lapses and because the camera carriage sandwiches the rails, it can be used diagonally or vertically. The CC-drive was created similarly. A friend in the industry had a Dana Dolly and asked if I would motorize it for him. Once people started coming to his studio and he showed the CC-drive to them, the demand was there. The CC-drive is a clamp on unit for handheld dollies, like the Dana Dolly. It's a direct drive, meaning the wheel has direct contact with the rail itself. If you have a Dana Dolly, it's ridiculous not to have this add on, it makes all your moves steady and smooth with a range of speeds. We also have a time lapse motor for this as well that comes with the kit.

BY THE WAY, WHAT IS ONE OF YOUR MOST FAVORITE OR MEMORABLE AERIAL PRODUCTION EXPERIENCES?

JESSE PLACKY: One of my most memorable shows was a few years back, when I had a chance to collaborate with Hans Rosenwinkle and Tyler Duke for a project called Mile High Jungle for Nat Geo. They were covering Pat Craig and his team from The Wild Animal Sanctuary (just east of Denver, CO) rescue wild animals from situations that

were inhuman. The reality show followed Pat and his team to other countries on some hairy rescues, but Condorcaml was asked to come out to the Sanctuary to shoot some establishing shots. We got the opportunity to fly over Lions, Tigers and Bears! I'm an animal lover and seeing the curiosity in the animals with the camera flying over head turned 800lbs tigers into playful house cats. Tracking a tiger staring down the lens was pretty moving for me.

COULD YOU ALSO SHARE WITH US ONE OF YOUR MOST FAVORITE OR MEMORABLE UNDERWATER PRODUCTION EXPERIENCES?

JESSE PLACKY: So I'm a land locked Surfer and Diver. When people hear I'm an underwater DP in Colorado, they question why I'm not on the coast. It's simple, love the mountains, and I also love the Ocean too. I appreciate the ocean that much more when I travel for an underwater shoot. The most memorial shoot as an underwater DP was last year for Kurt Miller's The Current. I was the fortunate one who got to go to Kauai and Tonga for the documentary about the healing powers of the water for those with disabilities. The highlight was working with an amazing cast and surf photographer Aaron Chang (www.aaronchang.com) filming Humpback Whales in Tonga. It was surreal to be in the water with them next to you, it is a bucket list item for sure.

ARE THERE ANY FUTURE PLANS FOR CONDORCAM THAT WE SHOULD KNOW ABOUT?



RAILcam. Photo Credit: David Townsend

JESSE PLACKY: Condorcaml is always evolving and researching new technology. We have integrated the Movi from Freefly systems with both the cablecam and RAILcam on certain shoots and have been really pleased with the results. You can sign up for our newsletter on our website or check out our facebook page for the latest productions.

IF YOU COULD SHARE SOME QUICK TIPS RELATED TO CAPTURING POV ANGLES AND SPECIALTY SHOTS, WHAT WOULD THEY BE?

JESSE PLACKY: I'm going to talk directly with POV shots here. With the GoPro revolution, it seemed like everyone became a POV specialist overnight. It was my bread and butter for years. Three tips would be. First - be sure to frame the shot properly. Frame what you want to see and be aware of other movement in frame and how it could affect the overall shot. Second - give the viewer a frame of reference, rather than just a helmet cam, where the image is just "floating" through space on a mountain biker for an example, put the camera on the frame where you see the handlebars. That fixed item (handlebars in lower frame) gives the viewer a better sense of speed and perspective. Third - have fun with it. Try new things, so of my best looks have come through experimenting.

TELL US ABOUT CONDORCAM'S NEWEST PRODUCTS.

JESSE PLACKY: Condorcaml is now selling two products, the CC-slider and the CC-drive. It's a new adventure and a whole separate business model than a service driven company that I have ran for the past 10 years. I look forward to the challenge and hope this allows Condorcaml to provide useful tools for other filmmakers. You can find out more on our website Condorcaml.com and please feel free to reach out and discuss how

we can help your next production with our services. The great thing about using Condorcaml, because we capture all sorts of moving images, we can best help you decide what system will suit your needs.

WHAT CAMERAS ARE COMPATIBLE WITH YOUR CONDORCAM SYSTEMS FOR AERIAL SHOTS, UNDERWATER SHOTS, AND OTHER POV ANGLE AND SPECIALTY SHOTS?

JESSE PLACKY: Condorcaml made its systems to be compatible with most cameras. We have a payload of 25lbs on our head, which pretty much fits most cameras. We use a Sony P1 style POV camera over a larger Sony 900 style handheld camera because of the length of the camera. The heaviest Rig we've flown in a RED One camera with a 50mm prime lens. Now with all the cinematic cameras getting smaller, we haven't ran into a problem getting the image quality that our clients are happy with. I'd say we Fly the RED Epic camera 70% of the time.

Photos courtesy of Condorcaml.

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ROTOLIGHT AND RTS EXHIBIT AT NAB2014, BOOTH #C12029

Rotolight is the award-winning manufacturer of the Rotolight ANOVA and Rotolight RL48 Ringlight. RTS, Inc. is the US importer and distributor of Rotolight LED Lighting. Rod Aaron Gammons, Managing Director of Rotolight, shares with us in this exclusive interview what Rotolight and RTS will be featuring at their Booth # C12029 at the 2014 NAB Show in Las Vegas.



Q&A

ARE THERE ANY NEW THINGS THAT ARE BEING ANNOUNCED FOR ROTOLIGHT AND RTS AT THE 2014 NAB SHOW IN LAS VEGAS?

SHOW IN LAS VEGAS?

ROD AARON GAMMONS: Rotolight and RTS will be debuting the Rotolight ANOVA Bi-Colour V2 range of 'totally flicker free' LED Floodlights, which deliver up to 3500 Watts (tungsten bulb equivalent) output whilst using 96% less energy than a standard tungsten bulb. The 'V2' Lights are now up to 350% brighter. The ANOVA range features the latest 'game-changing' LED technology that gives 'best in class' colour rendering with overall CRI > 95 and Skin tone > 98, available in either 'ULTRAWIDE' 110° beam angle for beautiful soft lighting, or 'STANDARD' 50° beam angle for greater straight line output and punch.

COULD YOU SHARE WITH US BRIEFLY SOME OF THE FILMS, BROADCAST COMPANIES, AND TELEVISION NETWORKS THAT HAVE USED ROTOLIGHT LED LIGHTING SOLUTIONS?

ROD AARON GAMMONS: Rotolight's range of multi-award winning LED lighting products have been used on set of major productions such as James Bond "Skyfall", "Captain Phillips" starring Tom Hanks, and by the BBC, ITV and CNN, and are continuously used by leading Photographers, DoPs and

Cinematographers worldwide. Recently reviewed as "Quite superb" by Rodney Charters ASC who is best known for his work on "24" and "Dallas" - honoured with a 'Career Achievement in Television Award' by the American Society of Cinematographers and twice Emmy Nominated.

ROTOLIGHT HAS GARNERED MULTIPLE AWARDS OVER THE YEARS. COULD YOU SHARE WITH US SOME OF THE AWARDS THAT ROTOLIGHT HAS RECEIVED?

ROD AARON GAMMONS: ANOVA won the Cine Gear Technical Achievement award, the Cinec Special Award for Scientific Achievement and Innovation, and the British Television Society (BKSTS) award for Technical achievement and innovation.

IN ADDITION TO THE ANOVA, WHAT OTHER LIGHTING SOLUTIONS WILL ROTOLIGHT AND RTS DEBUT AT NAB2014 IN LAS VEGAS?

ROD AARON GAMMONS: We are also debuting the new Rotolight Sound & Light Kit which includes the award winning Rotolight RL48 LED 'Ringlight' and Roto-Mic 'Broadcast-Quality' condenser shotgun microphone for use with DSLR cameras and camcorders. Adjustable for both loud and soft sound sources with the three position level control (-10dB / 0dB / +10dB), and eliminates 'rumble' using the two step high pass filter (80hz / flat).

The RL48-B LED Ringlight provides soft, diffuse 'continuous' lighting for both video and photography, delivering that classic 'Ring-Light' effect without 'Red Eye' or shadows, and simply slips over the Roto-Mic (or mounts on the hot shoe).

We will be demonstrating and debuting our latest range of multi award winning LED lights for on camera, location and studio at NAB, all of which are manufactured at PineWood Film Studios in the UK and have won over 15 major industry awards in the past 12 months.

ARE THERE ANY FUTURE PLANS FOR ROTOLIGHT AND RTS THAT WE SHOULD KNOW ABOUT?

ROD AARON GAMMONS: At Rotolight, we are always looking to deliver the most innovative and high quality LED lighting systems to our customers and always have some exciting new things in the works so watch this space. But our brand new latest ANOVA V2 Floodlights are really creating a huge buzz and excitement right now with ITV and BBC having both purchased of our new lights for their latest production and studio lighting, delivering the best in class colour rendering of any LED currently in the market, so we are really looking forward to showing that at NAB this year for the first time.

WWW.ROTOLIGHT.COM

ATOMOS EXHIBITS AT NAB2014, BOOTH #C9532



ATOMOS designs innovative, world-class recorders and playback devices. The Atomos Ninja 2, Samurai Blade, Ninja Blade, Ronin and Connect Series have empowered users by creating smart production tools that recording pristine footage directly from the cameras sensor. The choice of either Apple ProRes or AVID DNxHD offers instant editing with any NLE and no transcoding required. Recording directly onto HDD and SSD media adds reliability, low cost of media and long record times of up to 30 hours.

HD Pro Guide Magazine takes five with ATOMOS' William Thompson, Business Development Manager, APAC, to talk about ATOMOS at this year's NAB2014.

Q&A

ARE THERE ANY NEW THINGS THAT ARE BEING ANNOUNCED FOR ATOMOS AT THE 2014 NAB SHOW IN

LAS VEGAS?

WILLIAM THOMPSON: Of course! Our launch of the Ninja Blade at BVE was just a teaser. We want to reward the people that make the effort to attend NAB so we won't be revealing anything till the opening of NAB Show on Monday 7th of April.

ATOMOS is exhibiting all our award-winning recorder monitors – Samurai Blade, Ninja Blade, Ninja 2 and Ronin; and our line of HDMI to HD/SD-SDI and HD/SD-SDI to HDMI Connect converters. Also some extra treats to get everyone excited!

All our friends and customers know the passion and pride we put into design to produce great products. I can promise we have done it again this year. Those new to ATOMOS should drop by booth C9532 and ask one of our team why our products are so popular.

BY THE WAY, DO YOU DO TRAINING AND EDUCATIONAL WORKSHOPS FOR ATOMOS SYSTEMS AND SOLUTIONS?

WILLIAM THOMPSON: Yes, we work with partners and resellers to deliver training and educational workshops and are present at most trade shows - big and small. We also have a great support team that can be easily contacted by Facebook (/AtomosGlobal), Twitter (@Atomos_News) or by email (support@atomos.com).

IS THERE ANYTHING SPECIAL THAT YOU'RE DOING AT THE ATOMOS BOOTH #C9532 AT NAB2014 THAT WE CAN SHARE WITH READERS?

WILLIAM THOMPSON: We have some fantastic swag organised, so for any attendee that comes to our booth and mentions this article to one of our staff we will have a little present for them.

Twice a day we will also have big prize give-aways. We are inviting everyone to drop by our booth for the chance to win some great prizes including Ninja Blades and Samurai Blades.

Remember: Booth C9532 in Central Hall.

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RIGWHEELS EXHIBITS AT NAB2014, BOOTH #C12145

RigWheels tools are what you make of them. RigWheels offers solutions ranging from purely DIY components to full portable dolly/slider systems and everything in-between. The great part about the design is RigWheels systems can grow with you. You can start out with a set of the original MicroWheels to make a DIY dolly and then keep adding to your system as needed, as your camera grows, and as your needs grow. People are really surprised to see how much functionality they can get out of RigWheels assortment of solutions when they move from thinking about products in a single-purpose way and jump into the RigWheels multipurpose equipment playground.

Q&A

ARE THERE ANY NEW THINGS THAT ARE BEING ANNOUNCED FOR RIGWHEELS AT THE 2014 NAB SHOW IN

LAS VEGAS?

LANCE LUNDSTROM: Brand new for NAB and RigWheels are our PortaRail collapseable rail system and our Universal End Brackets. There are lots of suspended rail type camera dollies around but most all are very proprietary in function. We've worked for a long time on developing these two items so they can be used with our dolly systems As well as systems from many manufacturers. Our PortaRail is unique to the market because it allows professionals to travel with long lengths of precision machined rail where to do so in the past was either not possible or very cost prohibitive. The PortaRail starts at about half the price of other comparable options. With our Universal End Brackets We wanted to produce a bracket that is truly "universal" and believe we have threaded the needle between function, design and price.

These brackets are universal in both width and pipe size so they can be used with virtually any suspended rail type slider/dolly on the market. You can use pipe



with an outside diameter between 1" (24mm) and 2" (50mm). You can also use square/rectangular rails up to 1-3/4"

This is RigWheels first year at NAB, so we will be showing most all of our professional configurations. RigWheels products use what we call "shared component design" to deliver more functionality at better overall value. For example, some of the parts that are used in our dolly systems are the same parts that you can use in our mounting systems which allows you to get more camera setups while transporting less gear. You're going to see some real-world practical examples of how RigWheels tools can fit into your workflow, life... and car.

BY THE WAY, DO YOU DO TRAINING AND EDUCATIONAL WORKSHOPS FOR RIGWHEELS PRODUCTS AND SOLUTIONS?

LANCE LUNDSTROM: We focus on producing a lot of video content that is available on rigwheels.com to educate our customers. These are practical real-world tools that do not need much explication

in how they function. We try to show through our video content different production techniques and situations that people may not have previously considered using our tools in.

ARE THERE ANY FUTURE PLANS FOR RIGWHEELS THAT WE SHOULD KNOW ABOUT?

LANCE LUNDSTROM: RigWheels is always looking for new ways to make video production equipment more functional. We have a long list of items that we're working on but I can tell you one thing for sure.... If it's not multifunction, it's not RigWheels.

RIGWHEELS LINKS

Bookmark and Watch the Product Videos

PortaRail:

www.rigwheels.com/product/camera-slider-rail

End Brackets:

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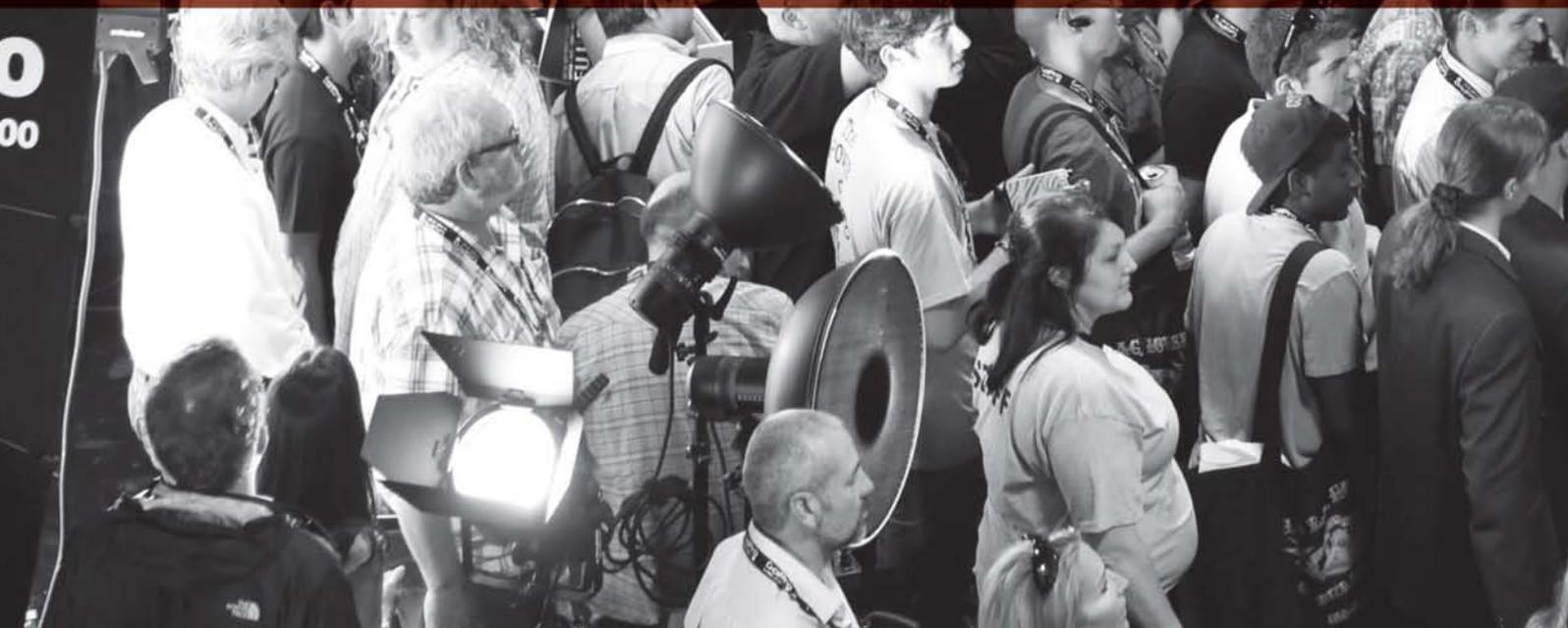


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EDITING INSIGHT

from Bryan Shaw

Always trust your instincts, don't second guess yourself.



Q&A WITH EDITOR BRYAN SHAW

Q&A

BRYAN, WHAT EDITING PROGRAMS DO YOU WORK WITH?

BRYAN SHAW: Avid, it is my system of choice. I like to run it with the Avid Artist Mix audio desk.

HOW CLOSELY DO YOU FOLLOW THE DIRECTOR'S VISION, FOR EXAMPLE, IN ONE OF YOUR MOST RECENT FILMS, "EVIL DEAD"? HOW MUCH CREATIVE FREEDOM DO YOU HAVE?

BRYAN SHAW: I spent a lot of time with Fede [Alvarez] prior to the shoot, and was at a lot of the pre-production meetings. It is very important to me to try and understand what the director's vision is for the movie. Fede and I worked closely all through the shoot as well. As the edit developed I, of course, had opportunities to offer up alternate ways of cutting scenes. Fede had a clear vision, but at the same time, he was very open to my ideas. It was one of the most enjoyable edits I have ever been part of.

HOW DO YOU MANAGE TO MAKE THE MOVIE FRESH, KNOWING THAT IT IS A

REMAKE OF A CLASSIC FILM? HOW DO YOU MAKE YOUR EDITING ORIGINAL?

BRYAN SHAW: The editing of any movie is naturally influenced by decisions made by the director and the DOP. I never really had to think about anything other than making the best movie it could be. The approach was always to make this film as good and scary a horror as possible.

WHAT ARE THE CHALLENGES SPECIFIC TO EDITING A HORROR FILM? HOW DID YOU OVERCOME THESE CHALLENGES?

BRYAN SHAW: I would say the suspense and release aspect of the film. Not just within individual scenes but throughout the entire film. I also keep in mind the contribution that the composer and sound designer will make, and in horror they play a very important part. So we worked very hard on our temp mix in terms of selection of temp music and the building of FX's and soundscapes. We adjusted certain scenes after we had a temp mix done for a screening, as we could see areas that needed adjustment. In some cases, we only adjusted things by as little as 4 frames, but the room it gave to the sound designer was critical. We also adjusted one scene near the head by a very

small amount, so the composer could fit just the right tempo to it. Having a good music editor during the later part of the director's cut was invaluable.

IN THIS GENRE, ONE WOULD IMAGINE THAT THE ELEMENT OF SUSPENSE IS PARAMOUNT. HOW DO YOU DEAL WITH THIS IN YOUR EDITING?

BRYAN SHAW: I think suspense is paramount, and as I said, in this genre you cannot underestimate the work that the composer and sound designer bring. The closer you can work with them the better the scenes and the movie will play. I must say I love sound design and music a great deal; and being a drummer doesn't hurt.

BECAUSE THE GENRE PLAYS HEAVILY ON THE CHARACTER'S PSYCHOLOGY, HOW DO YOU PICK SCENES THAT REVEAL THE CHARACTER'S THOUGHTS AND EMOTIONS? HOW DO YOU GET INSIDE THE CHARACTER'S HEAD?

BRYAN SHAW: That job is really done by the director, Fede. With the cast we had, I was delivered really good performances. I can't say enough about how hard they all worked, but I take my hat off to Jane Levy, she is brilliant. What she went through was hell, and she delivered every time.

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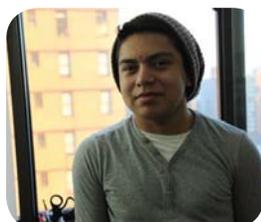
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